Acer Aspire 4732Z/4332 Notebook Computer Service Guide



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Revision History

Refer to the table below for changes made on this version of the Acer Aspire 4732Z/4332 Notebook Computer Service Guide.

| Chapter | Updates |
|---------|---------|
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Conventions

The following textual conventions are used in this service guide.

| SCREEN MESSAGES | Denotes actual messages that appear on screen. | |
|-----------------|--|--|
| NOTE | Gives additional information related to the current topic. | |
| WARNING | Alerts you to any physical risk or system damage that might result from doing or not doing specific actions. | |
| CAUTION | Gives precautionary measures to avoid possible hardware or software problems. | |
| IMPORTANT | Reminds you to do specific actions relevant to the accomplishment of procedures. | |

Service Guide Coverage

This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for our "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.

FRU Information

Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed service guide. For AUTHORIZED SERVICE PROVIDERS, your office may have a DIFFERENT part number code to those given in the FRU list of this printed service guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

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Features and Specifications

This chapter lists the features and specifications of the Acer Aspire 4732Z/4332 computer.

Features

This tables in this section list the system features and environmental requirements of the computer.

NOTE: The specifications listed in this section are for reference only. The exact configuration of your PC depends on the model purchased.

Hardware

| | Description | |
|-------------------------|--|--|
| Processor | Intel Pentium Processors for Mobile or Mobile Intel Celeron Processors | |
| System chipset | Mobile Intel GL40 Express Chipset | |
| | Intel I/O Controller Hub 9M (ICH9M) | |
| Memory | Two DIMM slots supporting DDR2 677 MHz modules | |
| | Maximum memory of 2 GB for 32-bit OS or 4 GB for 64-bit OS | |
| | 2 MB Flash BIOS; shadow RAM support | |
| Expansion options | 5-in-1 card reader slot | |
| | Supports MultiMediaCard (MMC), Secure Digital (SD), xD-Picture Card (xD), Memory Stick (MS), and Memory Stick PRO (MS PRO) cards | |
| Media storage | 2.5-inch 9.5 mm SATA hard disk drive (HDD) | |
| | Slim type Super Multi optical disc drive (ODD) | |
| Connectivity | Atheros AR8114 PCI-E Ethernet Controller | |
| | WLAN module compliant with 802.11 b/g and a/b/g/n standards | |
| | External V.92 56 Kbps USB 1.5 modem | |
| | Broadcom Blutonium BCM2045 Bluetooth module (optional) | |
| I/O ports | VGA port | |
| | Ethernet port (RJ-45) | |
| | Two USB 2.0 ports | |
| | Microphone-in jack | |
| | Headphones/speaker/Line-out jack | |
| | DC-in jack for AC adapter | |
| Audio | High-definition audio system | |
| | MS-Sound compatible | |
| | Two built-in stereo speakers | |
| | Microphone-in and line-out jacks | |
| Power supply | 6-cell 48.8 W 4400 mAh Lithium Ion battery pack | |
| | 3-pin 65 W 19V AC adapter | |
| | Charging period:1.5–2 hours for 0–80%, 3–3.5 hours for 0–99%, 3.5–4 hours for 0–100% (charge-in-use) | |
| | ENERGY STAR | |
| Physical specifications | • Dimension (W×D×H): 337 x 227 x 26/39.9 mm (13.27 x 8.94 x 1.02/1.6 in) | |
| | Weight: 2.4 kg (5.29 lb) | |

Display and Camera

| | Description | |
|--------------|--|--|
| Display type | 14" WXGA LCD panel | |
| | Supported resolutions: 1366×768, 1360×768, 1280×768, 1280×720, 1024×768, and 800×600 | |
| | 16:9 aspect ratio | |
| | Simultaneous multi-window viewing via Acer GridVista | |
| | Function control keys for manual adjustment of the display panel brightness level | |
| Webcam | 0.3M pixel webcam | |

Keyboard and Pointing Device

| Component | Description | |
|-----------------|--|--|
| Keyboard | 86-/87-/91-key EM4T series keyboard with embedded numeric keypad, inverted-T cursor keys, Internet scroll key, and 12 function keys (hotkeys) | |
| | Multilanguage support | |
| | Spill-proof | |
| Pointing device | Up/down scroll segment | |
| | Touchpad on/off function | |
| | Adjustable touchpad sensitivity function | |
| | Spill-resistant | |

LED Indicators and Buttons

| Component | Description | |
|----------------------------|-------------------------------|--|
| LED indicators | Power (blue) | |
| | Battery (blue/amber) | |
| | HDD access (blue) | |
| | Num Lock (blue) | |
| | Caps Lock (blue) | |
| Buttons with LED indicator | Touchpad on/off (blue/orange) | |
| | Power (blue) | |
| | WLAN (blue/orange) | |

Software

| Aspect | Description |
|--------------------------|--|
| Operating system support | Microsoft Genuine Windows Vista |
| Antivirus software | Norton Internet Security |
| Power management | ACPI 3.0 (Advanced Configuration Power Interface) standard |

Ergonomics and Security

| | Description | |
|------------|--|--|
| Ergonomics | Spill-resistant keyboard and touchpad | |
| | Status LED indicators allows constant monitoring of basic system functions | |
| | Function control keys allows convenient control of various system operations | |
| | User-programmable launch button for priority applications | |
| | DIY HDD and memory upgrade options | |
| | High-capacity, rechargeable battery pack | |
| | ACPI-compliant power management system | |
| Security | BIOS-based user, supervisor, and HDD passwords | |
| | Kensington lock | |

Environmental Requirements

| Aspect | Description |
|---------------------------|---|
| Temperature | Operating: 5 to 35 °C (41 to 95 °F) Non-operating: -20 to 65 °C |
| Humidity (non-condensing) | Operating: 20% to 80% RH non-condensing Non-operating: 20% to 80% RH non-condensing |

System Tour

The pictures and tables in this section illustrate the physical outlook of the computer.

Top View



| Item | Icon | Component | Function |
|------|------|---|--|
| 1 | | Integrated webcam | Web camera for video communication. (only for certain models) |
| 2 | | Display screen | Also called Liquid Crystal Display (LCD), displays computer output. |
| 3 | 7. | Touchpad button | Toggles the touchpad on and off. |
| | (h) | Power button | Turns the computer on and off. |
| | Ö | Wireless LAN (WLAN) communication button/ indicator | Enables/disables the WLAN function and indicates its status. |
| 4 | | Speakers | Left and right speakers deliver stereo audio output. |
| 5 | | Keyboard | For entering data into your computer. |
| 6 | | Touchpad | Touch-sensitive pointing device which functions like a computer mouse. |
| 7 | | Click buttons | The left and right buttons function like the left and right mouse buttons. |
| 8 | | Palmrest | Comfortable support area for your hands when you use the computer. |

| Item | Icon | Component | Function |
|------|-------------|---------------|--|
| 9 | > | HDD indicator | Lights up when there is hard drive access. |

Hotkeys

The computer employs hotkeys or key combinations to access most of the computer's controls like screen brightness and volume output.

To activate hotkeys, press and hold the **<Fn>** key before pressing the other key in the hotkey combination.

| | Icon | Function | Description | | |
|---|----------------------|-----------------|--|--|--|
| <fn> + <f4></f4></fn> | J | Sleep | Puts the computer in Sleep mode. | | |
| <fn> + <f5></f5></fn> | - /- | Display toggle | Switches display output between the display screen, an external monitor (if connected) and both. | | |
| <fn> + <f6></f6></fn> | - ∑ 3 | Screen blank | Turns the display screen backlight off to save power. Press any key to turn it back on. | | |
| <fn> + <f8></f8></fn> | ® | Speaker toggle | Turns the speakers on and off. | | |
| <fn> + < ■())) ▲ > Volume up</fn> | | Volume up | Increases the sound volume. | | |
| <fn> + < ■) ▼></fn> | ■) ▼ | Volume down | Decreases the sound volume. | | |
| <fn> + < - \(\bar{\cappa_{-}} \\ \dagger_{-} \\ \</fn> | <u>`</u> O(▲ | Brightness up | Increases the screen brightness. | | |
| <fn> + < - ♡ - ▼ ></fn> | ;O. ▼ | Brightness down | Decreases the screen brightness. | | |

Closed Front View



| Item | Icon | Component | Function |
|------|--------|--------------------|---|
| 1 | * | Power indicator | Lights up blue when the computer is turned on |
| | ñ | Battery indicator | Indicates the computer's battery status. |
| | Ė | | Blue - The computer is in AC mode. |
| | | | Amber - The battery is charging. |
| | | | Flashing amber - The battery charge is below critical level; battery requires charging. |
| 2 | SP PRO | 5-in-1 card reader | Supports MMC, SD, xD, MS, and MS PRO cards. |

Rear View



| | Component | Function |
|---|-------------------|---|
| 1 | Ventilation slots | Enable the computer to stay cool, even after prolonged use. |

Left View



| Item | Icon | Component | Function |
|------|--------------------|-------------------------------------|---|
| 1 | | DC-in jack | Connects to the AC adapter. |
| 2 | | External display (VGA) port | Connects to a display device (e.g., external monitor, LCD projector). |
| 3 | 용 | Ethernet port (RJ-45) | Connects to an Ethernet 10/100-based network |
| 4 | • | USB 2.0 ports | Connect to USB 2.0 devices (e.g., USB mouse, USB camera). |
| 5 | Microphone-in jack | | Accepts inputs from external microphones. |
| | ß | Headphone/speaker/ Line-out jack | Connects to audio line-out devices such as speakers, or headphones. |

Right View



| | Icon | Component | Function |
|---|------|--------------------------|---|
| 1 | | Optical disc drive (ODD) | Internal optical drive; accepts CDs or DVDs. |
| 2 | | ODD access indicator | Lights up when the optical drive is active. |
| 3 | | ODD eject button | Ejects the optical disc from the drive. |
| 4 | | Emergency eject hole | Ejects the optical drive tray when the computer is turned off. Note: Insert a paper clip to the emergency eject hole to eject the ODD tray when the computer is off. |
| 5 | K | Kensington lock notch | Connects to a Kensington-compatible computer security lock. Note: Wrap the computer security lock cable around an immovable object such as a fixed table or the handle of a locked drawer. Insert the lock into the notch and turn the key to secure the lock. Some keyless models are also available. |

Base View



| Item | Icon | Component | Function | |
|------|-----------------------|-----------------------------------|--|--|
| 1 | | Battery bay | Houses the computer's battery pack. | |
| 2 | Battery release latch | | Releases the battery pack for removal. | |
| 3 | | Battery lock | Locks the battery pack in position. | |
| 4 | HDD bay | | Houses the computer's hard disk. | |
| 5 | | Memory compartment | Houses the computer's memory modules. | |
| 6 | | Ventilation slots and cooling fan | Enable the computer to stay cool, even after prolonged use. Note: Do not cover or obstruct the fan opening. | |

Specifications

Processor

| | | Processors Type | | | | | |
|----------------------|-------------------------------------|-----------------|---------------------------------|-----------------|-----------------|-----------------|-----------------|
| | Intel Pentium Processors for Mobile | | Mobile Intel Celeron Processors | | | | |
| | T4200 | T3400 | 900 | T1600 | T1700 | 575 | 585 |
| CPU speed | 2.0 GHz | 2.16 GHz | 900 MHz | 1.66 GHz | 1.83 GHz | 2.0 GHz | 2.16 GHz |
| Bus speed | 800 MHz | 667 MHz | 100 MHz | 667 MHz | 667 MHz | 667 MHz | 667 MHz |
| L2 cache | 1 MB | 1 MB | 128 KB | 1 MB | 1 MB | 1 MB | 1 MB |
| Package type | Micro- FCPGA | Micro- FCPGA | Micro- PGA2 | Micro- FCPGA | Micro- FCPGA | Micro- FCPGA | Micro- FCPGA |
| Core stepping | MO | MO | PD0 | M0 | MO | M0 | MO |
| Thermal design power | 35W | 35W | 24W | 35W | 35W | 31W | 31W |

System Chipsets

| Item | Specification | |
|--------------|--|--|
| North bridge | Mobile Intel GL40/GM45 Express Chipset | |
| South bridge | 82801IBM I/O Controller Hub (ICH9M) | |

System Controllers

| Item | Specification | |
|----------------------|---|--|
| Hard drive | Integrated in the ICH9M | |
| Memory | Integrated in the Mobile Intel GL40/GM45 Express Chipset | |
| Video | Integrated in the Mobile Intel GL40/GM45 Express Chipset | |
| VGA memory | Intel UMA | |
| Audio | Conexant HD-Audio SmartAudio 221 (CX20561) | |
| Wireless LAN | Intel WiFi Link 512AG_MMW / Atheros XB63 / Broadcom BCM4312 | |
| Ethernet | Atheros AR8114 PCI-E Ethernet Controller | |
| Modem | External USB Lite + LSI modem | |
| Bluetooth (optional) | Broadcom Blutonium BCM2045 | |
| Keyboard | Winbond KBC773L | |
| Card reader | Realtek RTS5159 | |

Video

| Item | Specification |
|----------------------------------|--|
| Video controller | Integrated in the Mobile Intel GL40 / GM45 Express Chipset |
| FSB speed | GL40: 667 MHz GM45: 667 MHz / 800 MHz / 1066 MHz |
| Dual Independent Display support | Yes |
| Graphics output | GL40: LVDS, SDVO, TV Out, CRT GM45: LVDS, SDVO, TV Out, CRT, DVI, HDMI, DisplayPort |

Audio

| Item | Specification | |
|------------------|---|--|
| Audio controller | Conexant HD-Audio SmartAudio 221 (CX20561) | |
| Features | High-definition audio system, MS-Sound compatible, built-in stereo speakers; microphone-in and line-out jacks | |

Wireless LAN

| Item | Specification |
|---------------------|---|
| Model | Intel WiFi Link 512AG_MMW / Atheros XB63 / Broadcom BCM4312 |
| Connector interface | Mini Card form factor, based on PCIe electrical interface |
| IEEE WLAN standard | 802.11a/b/g |

Ethernet

| Item | Specification |
|---------------------|--|
| Ethernet controller | Atheros AR8114 PCI-E Ethernet Controller |
| LAN protocol | 10/100 Mbps |
| LAN connector type | RJ-45 |
| Features | Onboard Fast Ethernet, Wake on LAN ready |

Bluetooth

| Item | Specification |
|---------------------|---|
| Model | Broadcom Blutonium BCM2045 |
| Version | Bluetooth 2.0 (backward compatible with 1.1, 1.2) |
| EDR support | Yes |
| Practical data rate | 2.1 Mbit/s |

Keyboard

| Item | Specification | | | |
|---------------------|---|--|--|--|
| Keyboard controller | Vinbond KBC773L | | | |
| Brand | Parfon | | | |
| Features | 86-/87-/91-key EM4T series keyboard with embedded numeric keypad, inverted-T cursor keys, Internet scroll key, and 12 function keys (hotkeys) | | | |
| | Multilanguage support | | | |
| | Spill-proof | | | |

Card Reader

| Item | Specification |
|------------------------|-----------------------------|
| Card reader controller | Realtek RTS5159 |
| Card compatibility | MMC, SD, xD, MS, and MS PRO |

Memory

System Memory

| Item | Specification |
|----------------------------|---|
| Memory controller | Integrated in the Mobile Intel GL40/GM45 Express Chipset |
| Number of DIMM slot | 2 |
| Maximum memory size | 32-bit OS: 1 GB per slot; 2 GB maximum system memory 64-bit OS: 2 GB per slot; 4 GB maximum system memory |
| DIMM speed | 667 MHz (PC2-5300), 800 MHz (PC2-6400) |
| DIMM type | 200-pin SO-DIMM |
| Memory module combinations | You can install memory modules in any combination as long as they match the above specifications. |

Memory Module

| Item | Specification | on | | | | | | | |
|-------------------|------------------------------|---|----------------------------|------------------------------|---------------------------|---------------------------|--------------------------|--------------------------|--|
| Brand | Elpida | Hynix | Mic | Micron Na | | Nanya | | Samsung | |
| Part name | EBE11UE 6ACUA- 6E-E | HYMP112 S64CP6- Y5 LF HMP112S 6EFR6C- Y5 | MT8HTF1 2864HDY- 667 | MT8HTF1 2864HDY- 800 | NT1GT64 UH8D0FN -3C | NT1GT64 UH8D0FN -AD | M470T28 64EH3- CE6 | M470T28 64EH3- CF7 | |
| Density | 1 GB | | | | | | | | |
| Data rate | 667 MHz | 667 MHz | 667 MHz | 800 MHz | 667 MHz | 800 MHz | 667 MHz | 800 MHz | |
| RoHS compliant | Yes | | | | | | | | |
| | | | | | | | | | |
| Part name | EBE21UE 8ACUA- 6E-E LF | HYMP125 S64CP8- Y5 HMP125S 6EFR8C- Y5 | MT16HTF 25664HY- 667 | MT16HTF 25664HY- 800G1 | NT2GT64 U8HD0B N-3C | NT2GT64 U8HD0B N-AD | M470T5663 | BEH3-CE6 | |
| Density | 2 GB | | | | | | | | |
| Data rate | 667 MHz | 667 MHz | 667 MHz | 800 MHz | 667 MHz | 800 MHz | 667 MHz | | |
| RoHS compliant | Yes | | | | | | | | |

Hard Disk Drive

160-GB HDD

| Item | Specification | | | | | | |
|-------------------------|--------------------------|-------------------------|----------------------|-----------------|--|--|--|
| Product | HGST Travelstar 5K320 | Seagate Momentus 5400.5 | Toshiba MKxx55GSX | WD Scorpio Blue | | | |
| Model | HTS543216L9A300 | ST9160310AS | MK1655GSX | WD1600BEVT | | | |
| Form factor | 2.5 inch | 2.5 inch | | | | | |
| Interface | SATA 3.0 | SATA 3.0 | | | | | |
| Sector size (bytes) | 512 | 512 | | | | | |
| Data buffer (MB) | 8 | 8 | | | | | |
| Rotational speed (RPM) | 5400 | 5400 | | | | | |
| Interface transfer rate | 300 MB/s | | | | | | |
| Seek time, typical (ms) | 12 | 14 | 12 | 12 | | | |

250-GB HDD

| Item | Specification | | | | | | |
|-------------------------|----------------------------------|-------------------------------|-------------------------------|----------------------|--------------------|--|--|
| Product | Hitachi Travelstar 5K500.B | Seagate Momentus 5400.5 | Seagate Momentus 5400.6 | Toshiba MKxx55GSX | WD Scorpio Blue | | |
| Model | HTS545025B9 A300 | ST9250320AS | ST9250315AS | MK2555GSX | WD2500BEVT | | |
| Form factor | 2.5 inch | 2.5 inch | | | | | |
| Interface | SATA 3.0 | | | | | | |
| Sector size (bytes) | 512 | | | | | | |
| Data buffer (MB) | 8 | | | | | | |
| Rotational speed (RPM) | 5400 | | | | | | |
| Interface transfer rate | 300 MB/s | | | | | | |
| Seek time, typical (ms) | 12 | 14 | 14 | 12 | 12 | | |

320-GB HDD

| Item | Specification | | | | | | |
|-------------------------|-------------------------------|-------------------------|----------------------|-----------------|--|--|--|
| Product | Hitachi Travelstar 5K500.B | Seagate Momentus 5400.5 | Toshiba MKxx55GSX | WD Scorpio Blue | | | |
| Model | HTS545032B9A300 | ST9320320AS | MK3255GSX | WD3200BEVT | | | |
| Form factor | 2.5 inch | 2.5 inch | | | | | |
| Interface | SATA 3.0 | SATA 3.0 | | | | | |
| Sector size (bytes) | 512 | 512 | | | | | |
| Data buffer (MB) | 8 | 8 | | | | | |
| Rotational speed (RPM) | 5400 | 5400 | | | | | |
| Interface transfer rate | 300 MB/s | | | | | | |
| Seek time, typical (ms) | 12 | 12 14 12 12 | | | | | |

500-GB HDD

| Item | Specification | | | | | | |
|-------------------------|-------------------------------|-------------------------|----------------------|-----------------|--|--|--|
| Product | Hitachi Travelstar 5K500.B | Seagate Momentus 5400.6 | Toshiba MKxx55GSX | WD Scorpio Blue | | | |
| Model | HTS545050B9A300 | ST9500325AS | MK5055GSX | WD5000BEVT | | | |
| Form factor | 2.5 inch | 2.5 inch | | | | | |
| Interface | SATA 3.0 | SATA 3.0 | | | | | |
| Sector size (bytes) | 512 | | | | | | |
| Data buffer (MB) | 8 | 8 | | | | | |
| Rotational speed (RPM) | 5400 | 5400 | | | | | |
| Interface transfer rate | 300 MB/s | | | | | | |
| Seek time, typical (ms) | 12 14 12 12 | | | | | | |

Optical Disc Drive

| | Specification | | | | | |
|------------------------|----------------------|-----------|-------------|------------------|--|--|
| Brand | LG | Panasonic | PLDS | Sony NEC | | |
| Model | GT20N | UJ880A | DS-8A3S | Optiarc AD-7580S | | |
| Drive type | Super Multi Slim DVD | Rewriter | | | | |
| Write/read speed | 8x | 8x | | | | |
| Temperature, operating | 5 to 50 °C | | | | | |
| Tray height (mm)) | 12.7 | | | | | |
| Dimension (W x D, mm) | 128 × 127 | 128 × 129 | 128 × 126.1 | 128 × 129 | | |
| Weight (g) | 168 | 175 | 170 | 160 | | |
| Interface | SATA | | | | | |

LCD Panel

| Item | Specification | | | |
|------------------------------|-------------------|--------------------|-------------------|-------------------|
| Brand | AUO | СМО | LG Display | Samsung |
| Model | B140XW01 | N140B6 | LP140WH1 | LTN140AT01 |
| Screen size (diagonal, inch) | 14 | | | |
| Display area | 309.399mm(H) X | 173.952mm(V) (14.0 | " diagonal) | |
| Туре | Wide XGA | | | |
| Brightness (nits) | 220 | | | |
| View angle (U/D/R/L) | 15/35/45/45 | 20/45/45/45 | 60/60/70/70 | 45/45/15/30 |
| Backlight | LED | | | |
| Display resolution (pixels) | 1366×768 | | | |
| Number of colors | 262K | | | |
| Contrast ratio | 500:1 | 600:1 | 600:1 | 500:1 |
| Aspect ratio | 16:9 | | | |
| Response time (ms) | 8 | | | |
| Optical coating | Anti-glare | | | |
| Interface | LVDS | | | |
| Supply voltage (v) | 3.3 | | | |
| Outline dimensions (mm) | 324 × 192.5 × 5.2 | 324 × 192.5 × 5.2 | 324 × 192.5 × 5.5 | 323.5 × 192 × 5.2 |
| Weight (g) | 340 | 340 | 340 | 350 |

Webcam

| Item | Specification | |
|---------------|---------------|----------|
| Brand | Chicony | Suyin |
| Model | Calla | Camellia |
| Resolution | 0.3M | • |
| Lens | 2G | |
| DV capability | Yes | |

AC Adapter

| Item | Specification | | |
|-------|---------------|-------|---------|
| Brand | Delta | Hipro | Lite-On |

| Item | Specification | | | |
|---------------------|--------------------------------|-------------|-------------|------------------------------|
| Model | SADP-65KB DFJ ADP-65JH DB A | HP-OK065B13 | HP-A0652R3B | PA-1650-02AC PA-1650-22AC |
| Output rating | 19 V | 19.5 V | 19 V | 19 V |
| Output power | 65 W | 65 W | 90 W | 65 W |
| Input voltage (Vac) | 100–240 | 90–264 | 90–264 | 100–240 |
| Input frequency | 50–60 Hz | 47–63 Hz | 47–63 Hz | 50–60 Hz |

Battery Pack

| | Specification |
|---------------|---|
| Brand | Panasonic, Samsung, Sanyo, Simplo, Sony |
| Capacity | 4400 mAh |
| Pack capacity | 6 cells, 2.0 mAh |
| Туре | Lithium-ion, 3S2P |

Power Management

| ACPI mode | Description |
|-----------|--|
| G3 | Mechanical Off - All devices in the system are turned off completely. No electrical current is running through the system. Except for the real-time clock, power consumption is zero. The machine can be worked on without damaging the hardware or endangering service personnel. |
| G2/S5 | Soft Off - The computer consumes a minimal amount of power. No user mode or system mode code is run. It is not safe to disassemble the machine in this state. |
| G1 | Sleeping - The computer consumes a small amount of power, user mode threads are not being executed, and the system "appears" to be off (from the end user's perspective, the display is off, and so on). It is not safe to disassemble the machine in this state. |
| G0 | Working - The system dispatches user mode (application) threads and they execute. In this state, peripheral devices are having their power state changed dynamically. The user can select, through some UI, various performance/power characteristics of the system to have the software optimize for performance or battery life. The system responds to external events in real time. It is not safe to disassemble the machine in this state. |

BIOS

| Item | Specification |
|---------------|----------------------------------|
| BIOS chip | Winbond W25X16 |
| Setup utility | Phoenix SecureCore Setup Utility |

Antivirus Protection

| Item | Specification |
|---------|---------------------------------------|
| Product | Norton Internet Security 2009 (v16.0) |

System Utilities

Phoenix SecureCore Setup Utility

Phoenix SecureCore Setup Utility is a hardware configuration program built into your system's Basic Input/ Output System (BIOS). Since most systems are already properly configured and optimized, there is normally no need to run this utility.

You will need to run this utility under the following conditions:

- · When changing the system configuration including:
 - · Setting the system time and date
 - · Configuring the hard drives
 - · Specifying the boot device sequence
 - Configuring the power management modes
 - Setting up system passwords or making other changes to the security setup
- When a configuration error is detected by the system and you are prompted ("Run Setup" message) to
 make changes to the BIOS settings.

IMPORTANT: If you repeatedly receive "Run Setup" messages, the RTC battery located on the mainboard (RTC1) may be defective. In this case, the system cannot retain configuration values in CMOS. Replace the RTC battery with a new one.

NOTE: For ease of reading, Phoenix SecureCore Setup Utility will be simply referred to as "Setup" or "Setup Utility" in this Service Guide.

In the descriptive tables following each of the menu screen illustrations, settings in **boldface** are the default and suggested parameter settings.

The Setup Utility loads the configuration values in a battery-backed nonvolatile memory called CMOS RAM. This memory area is not part of the system RAM, which allows configuration data to be retained when power is turned off. The values take effect when the system is booted. POST uses these values to configure the hardware. If the values and the actual hardware do not agree, POST generates an error message. You must run this utility to change the BIOS settings from the default or current configuration.

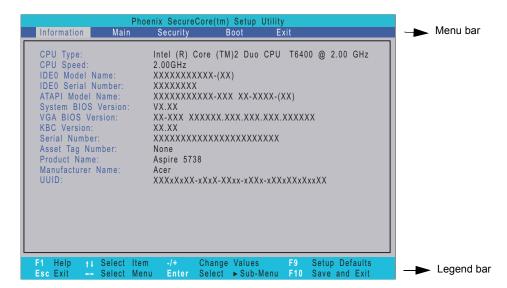
Accessing the Setup Utility

1. Turn on the computer.

If the computer is already turned on, save your data and close all open applications, then restart the computer.

2. During POST, press F2.

If you fail to press **F2** before POST is completed, you will need to restart the computer. Use the left (\leftarrow) and right (\rightarrow) arrow keys to move between selections on the menu bar.



Navigating through the Setup Utility

Use the keys listed in the legend bar on the bottom of the Setup screen to work your way through the various menu and submenu screens of the Setup Utility. The table below lists these legend keys and their respective functions.

| | Function |
|--------------------------------|---|
| \leftarrow and \rightarrow | To move between selections on the menu bar. |
| ↑ and ↓ | To move the cursor to the field you want. The currently selected field will be highlighted. The right side of each menu screen displays a field help panel— <u>Item Specific Help</u> panel. This panel displays the help text for the currently selected field. It updates as you move the cursor to each field. |
| F5 and F6 | To select a value for the currently selected field (only if it is user-configurable). Press these keys repeatedly to display all possible entries. A parameter that is enclosed in square brackets [] is user-configurable. Grayed-out parameters are not user-configurable for one of the following reasons: |
| | q The field value is auto-configured or auto-detected. |
| | q The field value is informational only. |
| | q The field is password-protected. |
| Enter | To select a field value (a pop-up menu displays) or submenu screen. |
| • | Indicates a submenu field. To view a submenu screen, use the ↑ and ↓ keys to move the cursor to the submenu you want, then press Enter . |
| Esc | If you press this key: |
| | q On one of the primary menu screens, the Exit menu displays. |
| | q On a submenu screen, the previous screen displays. |
| | When you are making selections from a pop-up menu, closes the pop-up without making a selection. |
| F1 or Alt-H | To bring up the <u>General Help</u> window. The <u>General Help</u> window describes other Setup navigation keys that are not displayed on the legend bar. |
| F9 | Press to load default system values. |
| F10 | Press to save changes and close the Setup Utility. |

Setup Utility Menus

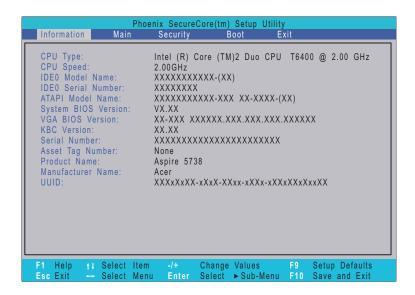
The Setup Utility has five menus for configuring the various system functions. These include:

- Information
- Main
- Security
- Boot
- Exit

NOTE: The screenshots used in this section are for illustration only. The values displayed may not be the same as those in your computer.

Information

The <u>Information</u> menu screen displays a summary of your computer hardware information. These information are necessary for troubleshooting and may be required when asking for technical support.

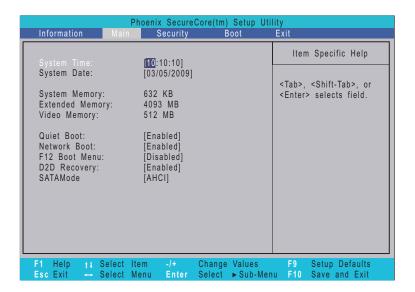


The following table describes the information displayed in the <u>Information</u> menu screen.

| | Description |
|---------------------|---|
| CPU Type | Displays the processor model. |
| CPU Speed | Displays the processor speed. |
| IDE0 Model Name | Displays the model name of the hard drive installed on the primary IDE master. |
| IDE0 Serial Number | Displays the serial number of the hard drive installed on the primary IDE master. |
| ATAPI Model Name | Displays the model name of the optical disc drive installed in the system. |
| System BIOS Version | Displays the current system BIOS version. |
| VGA BIOS Version | Displays the current VGA BIOS version. |
| KBC Version | Displays the keyboard controller version. |
| Serial Number | Displays the system serial number. |
| Asset Tag Number | Displays the system asset tag number |
| Product Name | Displays the official model name of the computer. |
| Manufacturer Name | Displays the manufacturer of the computer. |
| UUID | Displays your computer's UUID (universally unique identifier). UUID is an identifier standard used in software construction, standardized by the Open Software Foundation (OSF) as part of the Distributed Computing Environment (DCE). |

Main

The Main menu screen allows you to configure the basic system settings.



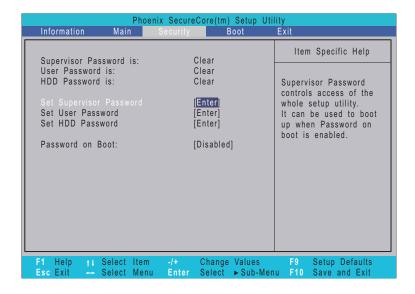
The following table describes the parameters in this screen.

| Field | Description | Value |
|-----------------|---|----------------------------------|
| System Time | Sets the system time. | HH:MM:SS (hour:minute:second) |
| System Date | Sets the system date. | MM/DD/YYYY (month/day/year) |
| System Memory | Displays the size of system memory detected during boot-up. | |
| Extended Memory | Displays the size of extended memory detected during boot-up. Extended memory –1MB | ktended memory = Total |
| Video Memory | Displays the size of video memory detected during boot-up. | |
| Quiet Boot | Enables or disables the Quiet Boot function. | Disabled |
| | When enabled, BIOS setup is in graphical mode and displays only an identification logo during POST and while booting. After booting, the screen displays the operating system prompt (such as DOS) or logo (such as Windows 95). If any error occurs while booting, the system automatically switches to text mode. When disabled, BIOS setup is in the conventional text mode where you see the system initialization details on the screen. | Enabled |
| Network Boot | When enabled, a remote host with appropriate boot image can boot this computer. (only works with an Ethernet device.) | Disabled Enabled |
| F12 Boot Menu | Enables or disables the Boot menu during POST. | Disabled Enabled |
| D2D Recovery | Enables or disables D2D Recovery function. This function allows the user to create a hidden partition on the hard drive to store the operation system. User can then use this partition to restore the system to factory defaults. | Disabled Enabled |

| Field | Description | Value |
|-----------|--|-------|
| SATA Mode | Select the SATA controller operating mode. | AHCI |
| | When set to AHCI (Advanced Host Controller Interface), the SATA controller enables its AHCI and RAID features when the computer boots up. | IDE |
| | When set to IDE, the SATA controller disables its AHCI and RAID functions when the computer boots up. | |
| | NOTE: The Acer eMachine D525/D725 computer does not support AHCI or RAID functions so set this parameter to IDE to speed up the boot-up time. | |

Security

The <u>Security</u> menu screen contains parameters that help safeguard and protect your computer from unauthorized use.



The following table describes the parameters in the Security menu screen.

| | Description | Value | |
|----------------------------|---|----------------------------|--|
| Supervisor Password is | Displays the supervisor password status. | Clear | |
| User Password is | Displays the user password status. | | |
| HDD Password is | Displays the HDD password status. | | |
| Set Supervisor Password | Press Enter to configure the supervisor password. When set, this password will allow the user to access and change all settings in the Setup Utility. | | |
| Set User Password | Press Enter to configure the user password. When set, this password will restrict a user's access to the Setup menus. Only the following menus will be accessible: System Time and System Date All Exit menu options excluding Load Setup Defaults A supervisor password must first be set before creating this user password. | | |
| Set HDD Password | Press Enter to configure the HDD password. When set, this password will restrict a user's access to the hard disk drive. It will be required during boot-up or when waking from hibernation mode. | | |
| Password on Boot | Referred to as power-on password. When set, the user or supervisor password will be required to boot up the system. A supervisor password must first be set before creating this password. | Disabled Enabled | |

Setting a system password

Note the following before you define a system password:

- The maximum length of password contains 8 alphanumeric characters—A Z, 0 9, and ';' (for French keyboard).
- System passwords are case-insensitive.
- When you are prompted to enter a password, you have three tries before the system halts. Do not forget your password. If you forget your password, you may have to return your computer to your dealer to reset it.

To set a system password:

1. Select a password parameter, then press Enter.

The password box appears.



2. Type a password then press Enter.

IMPORTANT: Be very careful when typing your password because the characters do not appear on the screen. Only shaded blocks representing each typed character are visible.

3. Retype the password to verify the first entry, then press **Enter**.

You will be prompted to save the new password.



- 4. Press Enter.
- 5. Press F10 to save the password and close the Setup Utility.

To change a system password:

1. Select a password parameter, then press Enter.

The password box appears.



- 2. Type the original password, then press Enter.
- **3.** Type a new password, then press **Enter**.

4. Retype the new password to verify the first entry, then press **Enter**.

You will be prompted to save the new password.



- Press Enter.
- 6. Press F10 to save the password and close the Setup Utility.

To remove a system password:

1. Select a password parameter, then press Enter.

The password box appears.

- 2. Type the original password, then press Enter.
- 3. Press Enter twice without entering anything in the new and confirm password fields.

You will be prompted to confirm the password removal.



- 4. Press Enter.
- 5. Press F10 to save the changes you made and close the Setup Utility.

Resetting a system password:

If you have forgotten the user password, the computer will continue to function normally but you will have limited access to the Setup Utility.

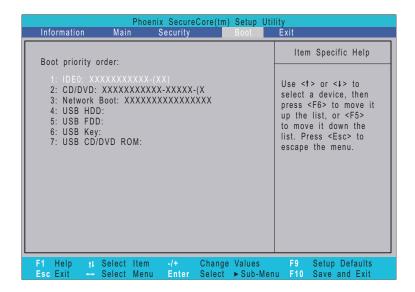
If you have enabled the Password on Boot field and you forget the supervisor password, you will not be able to boot up the computer. The same thing applies if you forget the HDD password.

To clear a lost BIOS password (user or supervisor password) you need to short the G61 hardware gap located near the processor socket (U33). Go to page 70 for instructions.

To regain access to your computer if you lose the HDD password, you need to generate a master password and unlock your hard drive. Go to page 71 for instructions.

Boot

The <u>Boot</u> menu screen allows users to set the preferred drive sequence in which the Setup Utility attempts to boot the operating system.



Setting the boot drive sequence

By default, the computer searches for boot devices in the following order:

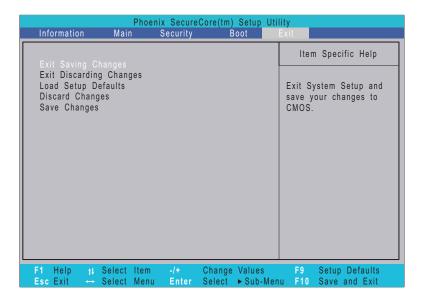
- 1. Hard disk drive
- 2. Optical disc drive
- 3. Network boot
- 4. External USB HDD
- 5. External USB floppy drive
- 6. External USB keyboard
- 7. External USB optical drive

To set the boot drive sequence:

- 1. Press ↑ or ↓ to highlight a bootable device.
- 2. Press F5 or F6 to move the selected device up or down the boot sequence.
- Press F10 to save the changes you made and close the Setup Utility.

Exit

The Exit menu screen lists the exit options to quit from the Setup Utility.



The following table describes the parameters in this screen.

| | Description |
|-------------------------|---|
| Exit Saving Changes | Saves changes made and closes the Setup Utility. Keyboard shortcut: F10· |
| Exit Discarding Changes | Discards changes made and closes the Setup Utility. |
| Load Setup Defaults | Loads the factory-default settings for all Setup parameters. Keyboard shortcut: F9 |
| Discard Changes | Discards all changes made to the Setup Utility and loads previous configuration settings. |
| Save Changes | Saves all changes made to the Setup Utility. |

System Disassembly

This chapter provides step-by-step instructions on how to disassemble the computer for maintenance and troubleshooting purposes.

Disassembly Tools

In performing the disassembly process, you will need the following tools:

- Wrist-grounding strap and conductive mat for preventing electrostatic discharge
- Philips screwdriver
- · Flat screwdriver
- · Plastic flat-blade screwdriver
- Plastic tweezers

Stages of the Disassembly Process

The disassembly process is divided into three stages:

- 1. External modules disassembly
- 2. Main unit disassembly
 - a. Upper case disassembly
 - b. Lower case disassembly
 - c. LDC module disassembly

IMPORTANT: The disassembly procedure described in this chapter is a gradual process, as illustrated in the flowcharts preceding each disassembly stage section. This means that users need to observe the instructions in a step-by step manner. To illustrate, if you want to remove the mainboard, you must first remove the keyboard, then disassemble the inside assembly frame in that order. Failure to observe the gradual process may result in component damage.

NOTE: To reinstall the system components and assemble the unit, perform the disassembly procedures in reverse.

Equivalent Torque Values

Torque values indicated in this chapter are expressed in kgf-cm (kilogram force-centimetre). For equivalent values in in-lb (inch-pound force) and N mm (newton millimeter), refer to the table below.

| | in-lb | N mm |
|-----|-------|--------|
| 1.6 | 1.39 | 156.93 |
| 3.0 | 2.60 | 294.25 |

System Screw List

Listed below are the screw types used in this system, plus their corresponding part numbers.

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with their corresponding components to avoid mismatches when putting back the components.

| | Part Number | Туре | Color |
|---|--------------|-----------|--------|
| Α | 86.00E33.736 | M2.5 x L6 | Black |
| В | 86.00A02.140 | M2 x L4 | Black |
| С | 86.9A554.4R0 | M3 x L3 | Silver |
| D | 86.9A552.4R0 | M2 x L4 | Black |
| E | 86.00E25.723 | M2 x L3 | Black |
| F | 86.00E34.738 | M2.5 x L8 | Black |
| G | 86.00E13.524 | M2 x L4 | Black |
| Н | 86.00F87.735 | M2.5 x L5 | Black |
| 1 | 86.00C07.220 | M2 x L3 | Silver |

Pre-disassembly Procedure

Before proceeding with the disassembly procedure, perform the steps listed below:

- 1. Turn off the power to the computer and all peripherals.
- 2. Unplug the power cord from the computer.

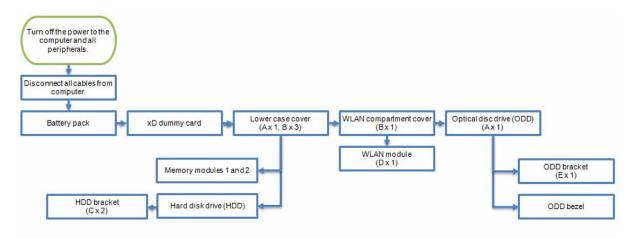


- 3. Unplug all other peripheral cables from the computer.
- 4. Close the notebook lid and place the computer on a flat, steady surface.
- 5. Turn the unit over with the base facing upward.

NOTE: Some images in chapter show eMachines logo, but this model is Aspire. For eMachines D725/D525 and Aspire 4732Z/4332 use the same housing (only middle cover, LCD cover, LCD bezel and upper case are different in appearance), Aspire 4732Z/4332 disassembling steps will be the same as eMachines D725/D525. Here we take eMachines D725/D525 as working sample for this chapter.

External Modules Disassembly

External Modules Disassembly Flowchart



| | Part Number | Туре | Color |
|---|--------------|-----------|--------|
| Α | 86.00E33.736 | M2.5 x L6 | Black |
| В | 86.00A02.140 | M2 x L4 | Black |
| С | 86.9A554.4R0 | M3 x L3 | Silver |
| D | 86.9A552.4R0 | M2 x L4 | Black |
| E | 86.00E25.723 | M2 x L3 | Black |

Removing the Battery Pack

1. Slide the battery lock to the unlock position (1).



- 2. Slide the battery latch all the way through to release the battery pack.
- 3. Remove the battery pack from its bay.



IMPORTANT: The battery has been highlighted with a yellow circle in the above image. Detach the battery and follow local regulations for disposing it.

Removing the xD Dummy Card

- 1. Push against the card, as if you were pushing it further into the slot, letting the card spring out.
- 2. Pull the xD dummy card out of its slot.



Removing the Lower Case Cover

- 1. Perform the "Removing the Battery Pack" procedure on the previous page.
- 2. Remove the screws securing the lower case cover.



| | Quantity | Color | Torque | Part Number |
|-----------|----------|-------|------------|--------------|
| M2.5 x L6 | 1 (#1) | Black | 3.0 kgf-cm | 86.00E33.736 |
| M2 x L4 | 3 (#2-4) | Black | 1.6 kgf-cm | 86.00A02.140 |

3. Pry loose the lower case cover from the main unit to remove it.



Removing the Memory Modules

- 1. Perform the "Removing the Lower Case Cover" procedure on page 29.
- 2. Push out the latches on both sides of the DIMM 1 slot.



3. Remove the memory module from its slot.



4. Repeat steps 2 and 3 to remove the DIMM 2 slot module.





Removing the Hard Disk Drive

- 1. Perform the "Removing the Lower Case Cover" procedure on page 29.
- 2. Grasp the black mylar tab and use it to slide the HDD assembly from its connector.



3. Remove the HDD assembly from its compartment.



4. Remove the screws on the HDD bracket.



| | Quantity | Color | Torque | Part Number |
|---------|----------|--------|------------|--------------|
| M3 x L3 | 2 | Silver | 3.0 kgf-cm | 86.9A554.4R0 |

5. Remove the bracket from the HDD module.



Removing the WLAN Module

- 1. Perform the "Removing the Battery Pack" procedure on page 28.
- 2. Remove the screw securing the WLAN module compartment cover.



| | Quantity | Color | Torque | Part Number |
|---------|----------|-------|------------|--------------|
| M2 x L4 | 1 | Black | 1.6 kgf-cm | 86.00A02.140 |

3. Pry loose the WLAN module compartment cover from the main unit to remove it.





4. Remove the WLAN module label sticker.



5. Disconnect the main and auxiliary antennas from the WLAN module.



6. Remove the screw securing the WLAN module.



| | Quantity | Color | Torque | Part Number |
|---------|----------|-------|------------|--------------|
| M2 x L4 | 1 | Black | 1.6 kgf-cm | 86.9A552.4R0 |

7. Remove the WLAN module from its slot.



Removing the Optical Disc Drive

- 1. Perform the "Removing the Lower Case Cover" procedure on page 29.
- 2. Remove the screw securing the ODD to the main unit.



| | Quantity | Color | Torque | Part Number |
|-----------|----------|-------|------------|--------------|
| M2.5 x L6 | 1 | Black | 3.0 kgf-cm | 86.00E33.736 |

3. Use a plastic flat screwdriver to push the ODD out of the main unit, then pull it out of its bay.



4. Remove the screw securing the ODD bracket.



| | Quantity | Color | Torque | Part Number |
|---------|----------|-------|------------|--------------|
| M2 x L3 | 1 | Black | 1.6 kgf-cm | 86.00E25.723 |

5. Detach the ODD bracket from the module.

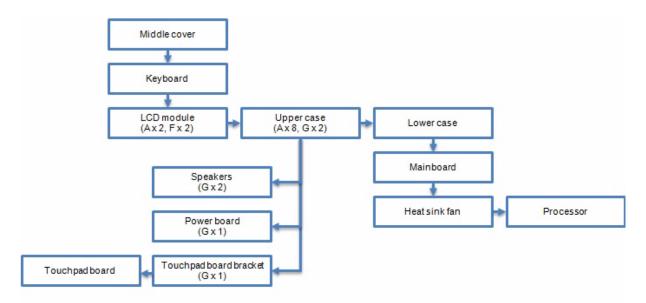


6. Detach the ODD bezel from the module.



Main Unit Disassembly

Main Unit Disassembly Flowchart



| | Part Number | Туре | Color |
|---|--------------|-----------|-------|
| Α | 86.00E33.736 | M2.5 x L6 | Black |
| F | 86.00E34.738 | M2.5 x L8 | Black |
| G | 86.00E13.524 | M2 x L4 | Black |

CAUTION: To avoid scratching or damaging the LCD panel, cover it with a protective film before disassembling the main unit.

Removing the Middle Cover

- 1. Perform the "Removing the Lower Case Cover" procedure on page 29.
- 2. Perform the "Removing the WLAN Module" procedure on page 32.
- 3. Use a plastic flat screwdriver to pry loose the middle cover. Start on the right side, continue to the center side, move towards the left side, then finally on the hinge sides until the middle cover is released from the upper case.



- 4. Open the LCD panel completely to facilitate the easy removal of the middle cover.
- **5.** Remove the middle cover from the upper case.



Removing the Keyboard

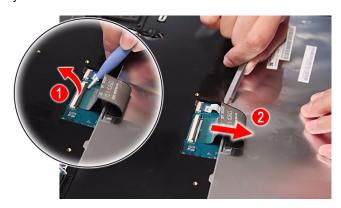
- 1. Perform the "Removing the Middle Cover" procedure on page 37.
- 2. Use a plastic flat screwdriver to push the latches on the top side of the keyboard.



3. Slide the keyboard towards the LCD module, then once it's detached from the upper case, turn it over the palmrest to gain access to the keyboard cable.



4. Disconnect the keyboard cable from its mainboard connector.



Removing the LCD Module

- 1. Perform the "Removing the Keyboard" procedure on page 37.
- 2. Disconnect the LCD cable from its mainboard connector.



3. Detach the LCD cable from its upper case latch.



4. Detach the WLAN antennas from their upper case latches.



5. Pull out the WLAN antennas from underneath the computer.



- 6. Turn the unit over to the base side.
- 7. Remove the bottom hinge screws securing the LCD module.



| | Quantity | Color | Torque | Part Number |
|-----------|----------|-------|------------|--------------|
| M2.5 x L6 | 2 | Black | 3.0 kgf-cm | 86.00E33.736 |

- 8. Turn the unit over again to remove the top LCD hinge screws.
- 9. Remove the top hinge screws securing the LCD module.



| Type | Quantity | Color | Torque | Part Number |
|-----------|----------|-------|------------|--------------|
| M2.5 x L8 | 2 | Black | 3.0 kgf-cm | 86.00E34.738 |

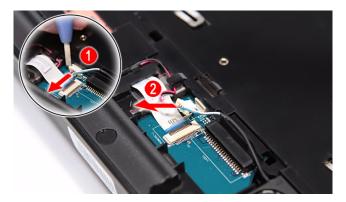
10. Detach the LCD module from the main unit.

Proceed to page 50 for instructions on how to disassemble the LCD module.



Removing the Upper Case

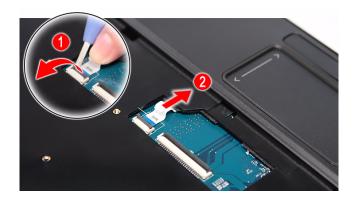
- 1. Perform the "Removing the LCD Module" procedure on page 38.
- 2. Disconnect the following system cables from their board connectors.
 - · Speaker cable



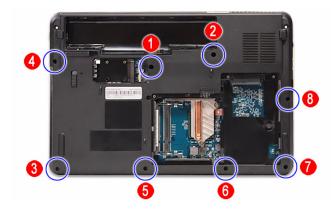
Power FFC



Touchpad board cable (TPAD1)

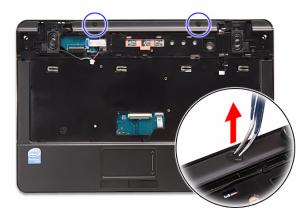


- 3. Turn the unit over to the base side.
- 4. Remove the bottom screws securing the upper case to the lower case.

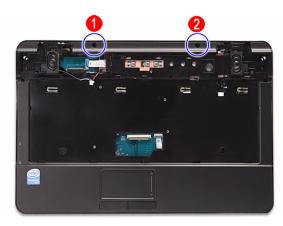


| | Quantity | Color | Torque | Part Number |
|-----------|----------|-------|------------|--------------|
| M2.5 x L6 | 8 | Black | 3.0 kgf-cm | 86.00E33.736 |

- **5.** Turn the unit over again to remove the top upper case screws.
- **6.** Remove the upper case rubber pads.



7. Remove the top upper case screws.



| Type | Quantity | Color | Torque | Part Number |
|---------|----------|-------|------------|--------------|
| M2 x L4 | 2 | Black | 1.6 kgf-cm | 86.00E13.524 |

8. Pry loose the upper case from the lower case to detach the former.



Removing the Speakers

- 1. Perform the "Removing the Upper Case" procedure on page 41.
- 2. Detach the speaker cables from their upper case latches.



3. Remove the screws securing the left and right speakers.



| | Quantity | Color | Torque | Part Number |
|---------|----------|-------|------------|--------------|
| M2 x L4 | 2 | Black | 1.6 kgf-cm | 86.00E13.524 |

4. Remove the left and right speakers from the upper case.



Removing the Power Board

- 1. Perform the "Removing the Upper Case" procedure on page 41.
- 2. Remove the screw securing the power board.



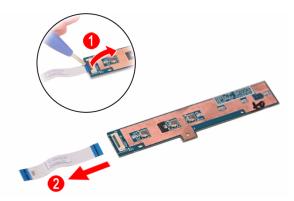
| | Quantity | Color | Torque | Part Number |
|---------|----------|-------|------------|--------------|
| M2 x L4 | 1 | Black | 1.6 kgf-cm | 86.00E13.524 |

3. Remove the power board from the upper case.



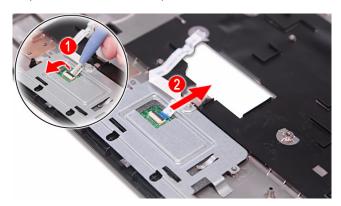
IMPORTANT: A circuit board that is >10 cm² has been highlighted with a yellow rectangle as shown in the above image. Follow local regulations for disposing this type of circuit board.

4. Disconnect the power FFC from the power board.

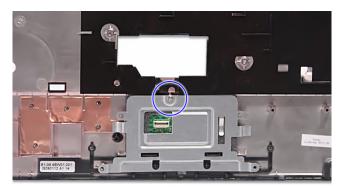


Removing the Touchpad Board

- 1. Perform the "Removing the Upper Case" procedure on page 41.
- 2. Disconnect the touchpad cable from the touchpad board.

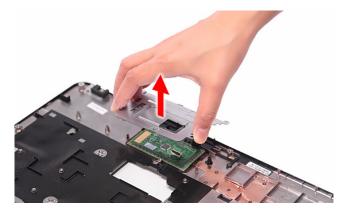


3. Remove the screw securing the touchpad board bracket.

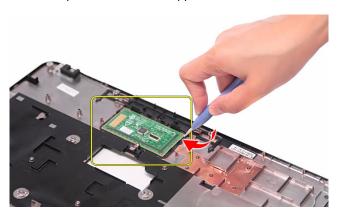


| | Quantity | Color | Torque | Part Number |
|---------|----------|--------|------------|--------------|
| M2 x L4 | 1 | Silver | 1.6 kgf-cm | 86.00E13.524 |

4. Remove the touchpad board bracket from the upper case.



5. Carefully pry loose the touchpad board from the upper case to detach it.

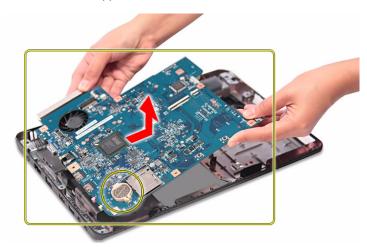


CAUTION: The touchpad board is glued to the upper case. Remove the touchpad board only if it is defective.

IMPORTANT: A circuit board that is >10 cm² has been highlighted with a yellow rectangle as shown in the above image. Follow local regulations for disposing this type of circuit board.

Removing the Mainboard

- 1. Perform the "Removing the Upper Case" procedure on page 41.
- 2. Remove the mainboard from the upper case.

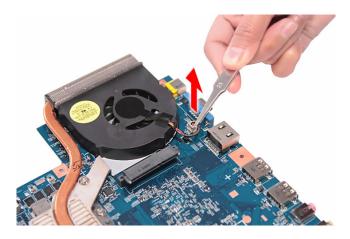


IMPORTANT: A circuit board that is >10 cm² has been highlighted with a yellow rectangle as shown in the above image. Follow local regulations for disposing this type of circuit board.

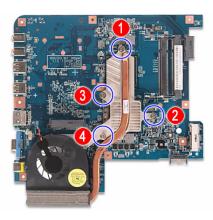
IMPORTANT: The RTC battery has been highlighted with a yellow rectangle in the above image. Detach the RTC battery and follow local regulations for disposing it.

Removing the Heat Sink Fan (HSF) Assembly

- **1.** Perform the "Removing the Mainboard" procedure on page 47.
- 2. Disconnect the HSF cable from its mainboard connector.

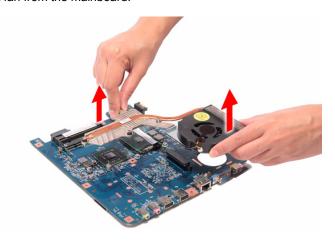


3. Loosen the heat sink screws.



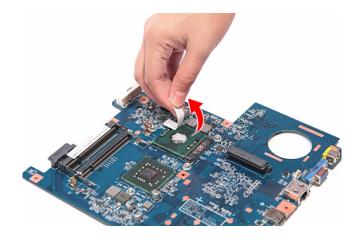
| | Quantity | Color | Torque | Part Number |
|---|----------|--------|------------|-------------|
| - | 4 | Silver | 1.6 kgf-cm | _ |

4. Remove the heat sink fan from the mainboard.



Removing the Processor

- 1. Perform the "Removing the Heat Sink Fan (HSF) Assembly" procedure on page 47.
- 2. Remove the CPU label sticker.



3. Use a flat screwdriver to turn the processor socket lock counter-clockwise to the unlock position.



4. Hold the processor by its edges and carefully remove it from its socket.



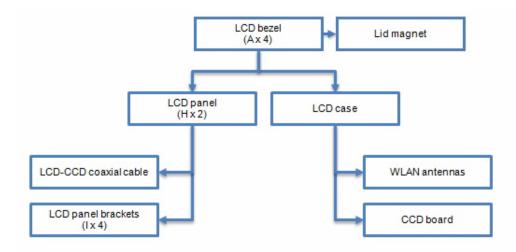
CAUTION: DO NOT lay the processor on its base to avoid bending or damaging the pins underneath it.

IMPORTANT: When installing a processor:

- Note the golden arrow on the corner to make sure the processor is properly oriented over the socket.
- Moisten a soft cloth with isopropyl alcohol and clean the processor die to remove any
 thermal grease residue. Wipe the die surface several times to make sure that no particles
 or dust contaminants are evident. Allow the alcohol to evaporate before continuing. Apply
 just enough thermal grease to evenly coat the surface of the processor die.

LCD Module Disassembly

LCD Module Disassembly Flowchart



| | Part Number | Туре | Color |
|---|--------------|-----------|--------|
| Α | 86.00E33.736 | M2.5 x L6 | Black |
| Н | 86.00F87.735 | M2.5 x L5 | Black |
| I | 86.00C07.220 | M2 x L3 | Silver |

Removing the LCD Bezel

- 1. Perform the "Removing the LCD Module" procedure on page 38.
- 2. Remove the rubber pads covering the LCD bezel screws.



3. Remove the screws securing the LCD bezel.



| | Quantity | Color | Torque | Part Number |
|-----------|----------|-------|------------|--------------|
| M2.5 x L6 | 4 | Black | 3.0 kgf-cm | 86.00E33.736 |

4. Carefully pry loose the bezel from the LCD case.



5. Detach the LCD bezel from the LCD case.



Removing the Lid Magnet

- 1. Perform the "Removing the LCD Bezel" procedure on page 51.
- 2. Remove the tape covering the lid magnet.



3. Remove the lid magnet from the LCD bezel.

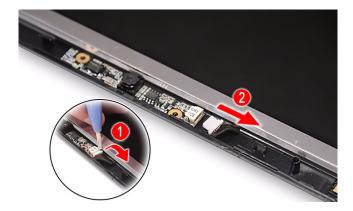


Removing the LCD Panel

- 1. Perform the "Removing the LCD Bezel" procedure on page 51.
- 2. Detach the LCD cable and WLAN antennas from their LCD case latches.



3. Disconnect the CCD board cable.



4. Remove the screws securing the LCD hinges to the LCD case.



| | Quantity | Color | Torque | Part Number |
|-----------|----------|-------|------------|--------------|
| M2.5 x L5 | 2 | Black | 3.0 kgf-cm | 86.00F87.735 |

5. Remove the LCD panel from the LCD case.



Removing the LCD-CCD Coaxial Cable

- 1. Perform the "Removing the LCD Panel" procedure on page 53.
- 2. Detach the CCD end of the LCD-CCD coaxial cable from the LCD panel.



3. Detach the clear adhesive tape protecting the LCD FPC cable connector, then disconnect the cable from the LCD panel PCB.



Removing the LCD Panel Brackets

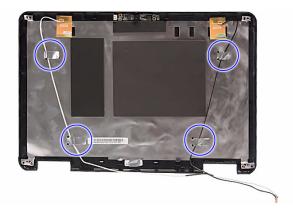
- 1. Perform the "Removing the LCD Panel" procedure on page 53.
- 2. Remove the screws securing the LCD panel brackets.



| | Quantity | Color | Torque | Part Number |
|---------|----------|--------|------------|--------------|
| M2 x L3 | 8 | Silver | 1.6 kgf-cm | 86.00C07.220 |

Removing the WLAN Antennas

- 1. Perform the "Removing the LCD Panel" procedure on page 53.
- 2. Detach the aluminum foil tabs securing the WLAN antennas.



3. Detach the WLAN antennas from the LCD case.



Removing the CCD Board

- 1. Perform the "Removing the LCD Panel" procedure on page 53.
- 2. Pry loose the CCD board from the LCD case to remove it.





CAUTION: The CCD board is glued to the LCD case. Remove the CCD board only if it is defective.

Troubleshooting

This chapter list the POST error indicators and BIOS beep codes, as well general troubleshooting instructions.

POST Error Indicators

When a system error is detected during POST (Power On Self Text), the Setup Utility will switch to diagnostic mode and will either:

- Displays a POST error message, or
- · Emits a series of beep codes

POST Error Messages

POST error messages tell users what failure the system has detected. Some error messages could be related to a hardware device. Others may indicate a problem with a device configuration. In some cases an error message may include recommendations for troubleshooting or require that you press the **Enter** key to display recommendations. Follow the instructions on the screen. It is recommended that you correct the error before proceeding, even if the computer appears to boot successfully.

The table below lists the messages that the BIOS has defined and can display.

If your system displays one of the messages marked below with an asterisk (*), write down the code and message and contact your Acer service provider.

IMPORTANT: If your system fails after you make changes in the Setup menus, reboot the computer, enter Setup again and load Setup defaults to correct the error.

| Error Messages | Check or do the following in sequence: |
|---|--|
| Stuck Key | See "Keyboard or Auxiliary Input Device Check" section on page 63. |
| System CMOS checksum bad - Default configuration used | RTC battery Run the BIOS Setup Utility to reconfigure the system time, then reboot system. |
| Real time clock error | RTC battery Run the BIOS Setup Utility to reconfigure system time, then reboot system. Mainboard |
| Previous boot incomplete - Default configuration used | Select "Load Setup Defaults" in the BIOS Setup Utility's Exit menu. RTC battery Mainboard |
| Invalid System Configuration Data | Select "Load Setup Defaults" in the BIOS Setup Utility's Exit menu. Mainboard |
| Operating system not found | Run the BIOS Setup Utility to check if the fixed disk and drive A are properly identified. Optical disc drive Hard disk drive Mainboard |

| Error Messages | Check or do the following in sequence: |
|---|--|
| Power-on indicator turns off and LCD is blank. | Power source (battery pack and power adapter.) See "Power System Check" section on page 64. Make sure all connectors are connected tightly and correctly. Reinstall the DIMM. Mainboard |
| Power-on indicator turns on and LCD is blank. | Power source (battery pack and power adapter.) See "Power System Check" section on page 64. Reconnect the LCD cable Hard disk drive LCD panel Mainboard |
| Power-on indicator turns on and LCD is blank. POST is visible when using an external CRT. | Reconnect the LCD cable.LCD panelMainboard |
| Power-on indicator turns on and a blinking cursor is during POST. | Make sure all connectors are connected tightly and correctly.Mainboard |
| Failure Fixed Disk | Reconnect the HDD connector. Select "Load Setup Defaults" in the BIOS Setup Utility's Exit menu. Hard disk drive Mainboard |
| No beep, power-on indicator turns off and LCD is blank. | Power source (battery pack and power adapter). See "Power System Check" on page 64 Make sure all connectors are connected tightly and correctly. Reconnect the DIMM. Mainboard |
| No beep, power-on indicator turns on and LCD is blank. | Power source (battery pack and power adapter). See "Power System Check" on page 64 Reconnect the LCD cable. Hard disk drive LCD cable LCD panel Mainboard |
| No beep, power-on indicator turns on and LCD is blank. But you can see POST on an external CRT. | Reconnect the LCD cable.LCD panelMainboard |
| No beep, power-on indicator turns on and a blinking cursor shown on LCD during POST. | Make sure all connectors are connected tightly and correctly.Mainboard |
| No beep during POST but system runs correctly. | SpeakerMainboard |

POST Beep Codes

When no POST error message is displayed but the computer stops during POST, listen for beep codes.

| Code | Beeps | POST Routine Description | |
|------|---------|---|--|
| 02h | | Verify Real Mode | |
| 03h | | Disable Non-Maskable Interrupt (NMI) | |
| 04h | | Get CPU type | |
| 06h | | Initialize system hardware | |
| 08h | | Initialize chipset with initial POST values | |
| 09h | | Set IN POST flag | |
| 0Ah | | Initialize CPU registers | |
| 0Bh | | Enable CPU cache | |
| 0Ch | | Initialize caches to initial POST values | |
| 0Eh | | Initialize I/O component | |
| 0Fh | | Initialize the local bus IDE | |
| 10h | | Initialize Power Management | |
| 11h | | Load alternate registers with initial POST values | |
| 12h | | Restore CPU control word during warm boot | |
| 13h | | Initialize PCI Bus Mastering devices | |
| 14h | | Initialize keyboard controller | |
| 16h | 1-2-2-3 | BIOS ROM checksum | |
| 17h | | Initialize cache before memory autosize | |
| 18h | | 8254 timer initialization | |
| 1Ah | | 8237 DMA controller initialization | |
| 1Ch | | Reset Programmable Interrupt Controller | |
| 20h | 1-3-1-1 | Test DRAM refresh | |
| 22h | 1-3-1-3 | Test 8742 Keyboard Controller | |
| 24h | | Set ES segment register to 4 GB | |
| 26h | | Enable A20 line | |
| 28h | | Autosize DRAM | |
| 29h | | Initialize POST Memory Manager | |
| 2Ah | | Clear 215 KB base RAM | |
| 2Ch | 1-3-4-1 | RAM failure on address line xxxx* | |
| 2Eh | 1-3-4-3 | RAM failure on data bits xxxx* of low byte of memory bus | |
| 2Fh | | Enable cache before system BIOS shadow | |
| 30h | 1-4-1-1 | RAM failure on data bits xxxx* of high byte of memory bus | |
| 32h | | Test CPU bus-clock frequency | |
| 33h | | Initialize Phoenix Dispatch Manager | |
| 36h | | Warm start shut down | |
| 38h | | Shadow system BIOS ROM | |
| 3Ah | | Autosize cache | |
| 3Ch | | Advanced configuration of chipset registers | |
| 3Dh | | Load alternate registers with CMOS values | |
| 42h | | Initialize interrupt vectors | |

| Code | Beeps | POST Routine Description | |
|------|---------|--|--|
| 45h | | POST device initialization | |
| 46h | 2-1-2-3 | Check ROM copyright notice | |
| 48h | | Check video configuration against CMOS | |
| 49h | | Initialize PCI bus and devices | |
| 4Ah | | Initialize all video adapters in system | |
| 4Bh | | QuietBoot start (optional) | |
| 4Ch | | Shadow video BIOS ROM | |
| 4Eh | | Display BIOS copyright notice | |
| 50h | | Display CPU type and speed | |
| 51h | | Initialize EISA board | |
| 52h | | Test keyboard | |
| 54h | | Set key click if enabled | |
| 58h | 2-2-3-1 | Test for unexpected interrupts | |
| 59h | | Initialize POST display service | |
| 5Ah | | Display prompt "Press F2 to enter SETUP" | |
| 5Bh | | Disable CPU cache | |
| 5Ch | | Test RAM between 512 and 640 KB | |
| 60h | | Test extended memory | |
| 62h | | Test extended memory address lines | |
| 64h | | Jump to User Patch1 | |
| 66h | | Configure advanced cache registers | |
| 67h | | Initialize Multi Processor APIC | |
| 68h | | Enable external and CPU caches | |
| 69h | | Setup System Management Mode (SMM) area | |
| 6Ah | | Display external L2 cache size | |
| 6Bh | | Load custom defaults (optional) | |
| 6Ch | | Display shadow-area message | |
| 6Eh | | Display possible high address for UMB recovery | |
| 70h | | Display error messages | |
| 72h | | Check for configuration errors | |
| 76h | | Check for keyboard errors | |
| 7Ch | | Set up hardware interrupt vectors | |
| 7Eh | | Initialize coprocessor if present | |
| 80h | | Disable onboard Super I/O ports and IRQs | |
| 81h | | Late POST device initialization | |
| 82h | | Detect and install external RS232 ports | |
| 83h | | Configure non-MCD IDE controllers | |
| 84h | | Detect and install external parallel ports | |
| 85h | | Initialize PC-compatible PnP ISA devices | |
| 86h | | Re-initialize onboard I/O ports | |
| 87h | | Configure Motherboard Configurable Devices (optional) | |
| 88h | | Initialize BIOS Data Area | |
| 89h | | Enable Non-Maskable Interrupts (NMIs) | |
| - = | | the state of the s | |

| Code | Beeps | POST Routine Description |
|---------|-------|--|
| 8Ah | | Initialize Extended BIOS Data Area |
| 8Bh | | Test and initialize PS/2 mouse |
| 8Ch | | Initialize floppy controller |
| 8Fh | | Determine number of ATA drives (optional) |
| 90h | | Initialize hard-disk controllers |
| 91h | | Initialize local-bus hard-disk controllers |
| 92h | | Jump to UserPatch2 |
| 93h | | Build MPTABLE for multi-processor boards |
| 95h | | Install CD-ROM for boot |
| 96h | | Clear huge ES segment register |
| 97h | | Fixup Multiprocessor table |
| 98h 1-2 | 2 | Search for option ROMs. One long, two short beeps on checksum failure. |
| 99h | | Check for SMART drive (optional) |
| 9Ah | | Shadow option ROMs |
| 9Ch | | Set up Power Management |
| 9Dh | | Initialize security engine (optional) |
| 9Eh | | Enable hardware interrupts |
| 9Fh | | Determine number of ATA and SCSI drives |
| A0h | | Set time of day |
| A2h | | Check key lock |
| A4h | | Initialize Typematic rate |
| A8h | | Erase F2 prompt |
| AAh | | Scan for F2 key stroke |
| ACh | | Enter SETUP |
| AEh | | Clear Boot flag |
| B0h | | Check for errors |
| B2h | | POST done- prepare to boot operating system |
| B4h 1 | | One short beep before boot |
| B5h | | Terminate QuietBoot (optional) |
| B6h | | Check password (optional) |
| B9h | | Prepare Boot |
| BAh | | Initialize DMI parameters |
| BBh | | Initialize PnP Option ROMs |
| BCh | | Clear parity checkers |
| BDh | | Display MultiBoot menu |
| BEh | | Clear screen (optional) |
| BFh | | Check virus and backup reminders |
| C0h | | Try to boot with INT 19 |
| C1h | | Initialize POST Error Manager (PEM) |
| C2h | | Initialize error logging |
| C3h | | Initialize error display function |
| i I | | Initialize system error handler |

| Code | Beeps | POST Routine Description |
|------|-------|--|
| C5h | | PnPnd dual CMOS (optional) |
| C6h | | Initialize notebook docking (optional) |
| C7h | | Initialize notebook docking late |
| C8h | | Force check (optional) |
| C9h | | Extended checksum (optional) |
| D2h | | Unknown interrupt |

BIOS Beep Codes for Boot Block in Flash ROM

| | Beeps | For Boot Block in Flash ROM |
|-----|-------|-----------------------------------|
| E0h | | Initialize the chipset |
| E1h | | Initialize the bridge |
| E2h | | Initialize the CPU |
| E3h | | Initialize the system timer |
| E4h | | Initialize system I/O |
| E5h | | Check force recovery boot |
| E6h | | Checksum BIOS ROM |
| E7h | | Go to BIOS |
| E8h | | Set Huge Segment |
| E9h | | Initialize Multiprocessor |
| EAh | | Initialize OEM special code |
| EBh | | Initialize PIC and DMA |
| ECh | | Initialize Memory type |
| EDh | | Initialize Memory size |
| EEh | | Shadow Boot Block |
| EFh | | System memory test |
| F0h | | Initialize interrupt vectors |
| F1h | | Initialize Run Time Clock |
| F2h | | Initialize video |
| F3h | | Initialize System Management Mode |
| F4h | 1 | Output one beep before boot |
| F5h | | Boot to Mini DOS |
| F6h | | Clear Huge Segment |
| F7h | | Boot to Full DOS |

Troubleshooting Procedure

Perform the following procedure to determine the cause of a computer problem.

- 1. Obtain the failure symptoms in as much detail as possible.
- 2. Verify the symptoms by attempting to recreate the failure by running the diagnostic tests or repeating the same operation.
- 3. Disconnect all power source from the computer when performing an assembly or disassembly procedure.
- 4. Perform the following visual inspection before you continue.
 - Power cords are properly connected and secured.
 - There are no obvious shorts or opens.
 - There are no burned or heated components.
 - All components appear normal.

System Check Procedures

NOTE: The diagnostic tests are intended to test only Acer products. Non-Acer products, prototype cards, or modified options can give false errors and invalid system responses.

External CD/DVD-ROM Drive Check

Perform the following procedures to isolate the possible problem a controller, drive, or CD-ROM.

- 1. Boot from the diagnostic disc and start the diagnostic programs.
- 2. Check if the CD-ROM Test result is pass.
- 3. Follow the on-screen instructions.

If an error occurs, reconnect the drive to the connector on the mainboard. If the error persists, do the following:

- Reconnect the CD/DVD-ROM drive.
- 2. Replace the CD/DVD-ROM drive.
- 3. Replace the mainboard.

Keyboard or Auxiliary Input Device Check

Remove the external keyboard if the internal keyboard is to be tested.

If the internal keyboard does not work or an unexpected error occurs, make sure that the flexible cable extending from the internal keyboard is correctly connected to the mainboard. If the keyboard cable connection is correct, run the Keyboard Test.

If the tests detect a keyboard problem, do the following procedures in sequence to correct the problems. Do not replace a non-defective FRU:

- Reconnect the keyboard cable.
- 2. Replace the keyboard.
- 3. Replace the mainboard.

The following auxiliary input devices are supported by this computer:

- q Numeric keypad
- g External keyboard

If any of these devices do not function, reconnect the cable and repeat above procedures.

Memory Check

NOTE: Make sure that the DIMM is properly installed into the connector. A loose connection can cause an error.

Do the following:

- Boot from the diagnostic diskette and start the diagnostic program.
- 2. Go to the diagnostic memory in the test items.
- 3. Press F2 in the test items.
- 4. Follow onscreen instructions.

Power System Check

Do the following:

- 1. Remove the battery pack.
- 2. Connect the power adapter and check the power supply.
- 3. Disconnect the power adapter and install the battery pack; then check that power supply.

Check the Power Adapter

Unplug the power adapter cable from the system and measure the output voltage at the plug of the power adapter cable.

- 1. If the voltage is not correct, replace the power adapter.
- 2. If the voltage is within range, do the following:
 - Replace the mainboard.
 - b. If the problem is not resolved, see "Undetermined Problems" section on page 65.
 - c. If the voltage is not correct, go to the next step.

NOTE: An audible noise from the power adapter does not always indicate a defect.

- 3. If the power-on indicator does not light up, check if the adapter's power cord is properly connected to the system.
- 4. If the operational charge does not work, see "Check the Battery Pack" on page 64.

Check the Battery Pack

Do the following:

Using the Power Management program to identify whether a problem occurs while the battery pack during recharge or discharge:

- 1. Open Power Management in the Control Panel.
- **2.** In the Power Meter tab, confirm if the parameters for Current Power Source and Total Battery Power Remaining are correct.
- 3. Repeat the steps 1 and 2 for both battery pack and adapter.

Using hardware to identify whether you should replace the battery pack or not:

- 1. Power off the system.
- 2. Remove the battery pack and measure the voltage between terminals one (+) and seven (-). There are seven terminals here.
- 3. If the voltage is still less than 7.5 Vdc after recharging, replace the battery pack.

If the battery status indicator does not light up, remove the battery pack. If the charge indicator still does not light up, replace the AC/DC charger board.

Touchpad Check

If the touchpad doesn't work, do the following procedures in sequence to correct the problem. Do not replace a non-defective FRU:

- After rebooting, run the Tracking Pad PS2 Mode Driver. For example Syn touch driver.
- Run the utility with the PS/2 mouse function and check if the mouse is working.
- 3. If the PS/2 mouse does not work, then click if the main board to switch board FPC is connected properly.
- If the mainboard to switch board FPC is connected correctly, then check if the FFC on the touchpad board is connected properly.
- **5.** If the FFC on the touchpad board is connected correctly, check if LS851 JP1 Pin6 = 5V are pules. If yes, then replace switch board. If not, then go to the next step.
- Replace the touchpad board.
- 7. If the touchpad still does not work, then replace the FPC on trackpad board.

After you use the touchpad, the pointer drifts on the screen for a short time. This self-acting pointer movement will occur when a slight, steady pressure is applied to the touchpad pointer. This symptom is not a hardware problem. No actions are necessary to be taken if the pointer movement stops in a short period of time.

Intermittent Problems

Intermittent system hang problems can be caused by a variety of reasons that have nothing to do with a hardware defect, such as: cosmic radiation, electrostatic discharge, or software errors. FRU replacement should be considered only when a recurring problem exists.

When analyzing an intermittent problem, do the following:

- 1. Run the advanced diagnostic test for the mainboard in loop mode at least 10 times.
- 2. If no error is detected, do not replace any FRU.
- 3. If any error is detected, replace the FRU. Rerun the test to verify that there are no more errors.

Undetermined Problems

NOTE: Verify that all attached devices are supported by the computer.

NOTE: Verify that the power supply being used at the time of the failure is operating correctly. (See "Power System Check" on page 64)

Follow procedures below to isolate the failing FRU. Do not isolate non-defective FRU.

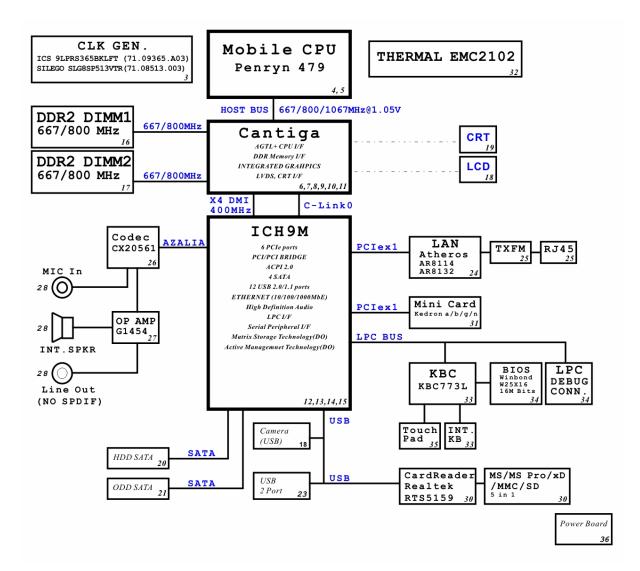
- Power off the computer.
- 2. Visually check them for damage. If any problems are found, replace the FRU.
- 3. Remove or disconnect all of the following devices:
 - Non-Acer devices
 - · Printer, mouse, and other external devices
 - · Battery pack
 - · Hard disk drive
 - DIMM
 - · CD/DVD-ROM drive
- 4. Power on the computer.
- 5. Determine if the problem has been resolved.
- 6. If the problem does not recur, reconnect the removed devices one at a time until you find the failed FRU.
- If the problem persists, replace the mainboard, and then LCD assembly (one at a time). Do not replace a non-defective FRU.

System Architecture

This chapter shows the block diagram and board layout of the Acer Aspire 4732Z/4332 computer. Procedures for clearing the BIOS and HDD passwords, as well as instructions for BIOS recovery are also provided.

Block Diagram

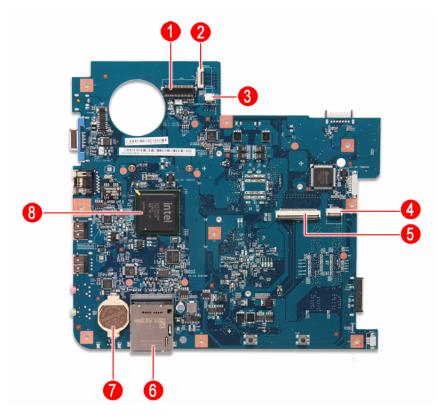
The core subsystems of the Acer Aspire 4732Z/4332 are depicted in the following block diagram.



Mainboard Layout

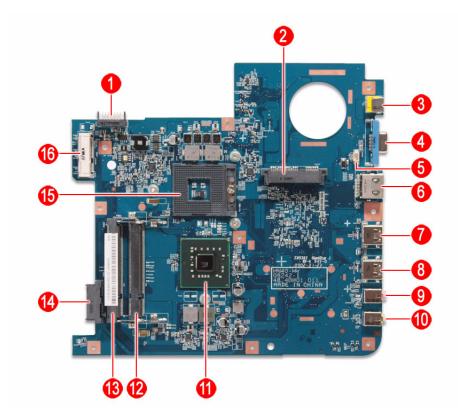
This section shows the major mainboard components

Top View



| | Code | Component |
|---|----------|---------------------------------|
| 1 | LCD1 | LCD-CCD coaxial cable connector |
| 2 | POWERCN1 | Power board cable connector |
| 3 | SPK1 | Speaker cable connector |
| 4 | TPAD1 | Touchpad board cable connector |
| 5 | KB1 | Keyboard cable connector |
| 6 | CARD1 | 5-in-1 card reader module |
| 7 | RTC1 | RTC battery |
| 8 | U16 | Intel ICH9M chipset |

Bottom View



| | Code | Component |
|----|--------|--------------------------------|
| 1 | BAT1 | Battery pack connector |
| 2 | HDD1 | HDD module connector |
| 3 | DC1 | DC-in jack |
| 4 | CNt1 | VGA port |
| 5 | FAN1 | Heat sink fan cable connector |
| 6 | RJ1 | Ethernet port |
| 7 | USB1 | USB 2.0 ports |
| 8 | USB2 | - 00B 2.0 ports |
| 9 | MC1 | Microphone-in jack |
| 10 | LOUT1 | Line-out jack |
| 11 | NB1 | Mobile Intel GM45 or GL40 GMCH |
| 12 | DM2 | DIMM slots |
| 13 | DM1 | - Dilvilvi 3i0to |
| 14 | ODD1 | ODD module connector |
| 15 | U33 | Processor socket |
| 16 | MINIC1 | WLAN module slot |

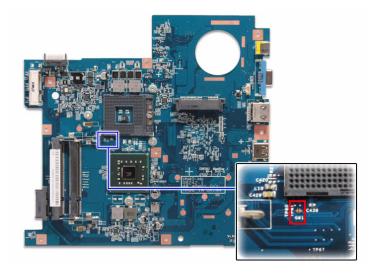
Clearing a BIOS Password

To clear a lost BIOS password (user or supervisor password) you need to short the G61hardware gap located near the HDD connector.

| | Default Setting | Function |
|-----|-----------------|---|
| G61 | Open (normal) | Short to clear the user and supervisor passwords. |

To clear a BIOS password:

- 1. Turn off the computer and unplug all the peripherals connected to it.
- 2. Unplug the power cord from the computer.
- 3. Remove the battery pack according to the instructions described on page 28.
- 4. Remove the lower case cover according to the instructions described on page 29.
- 5. Remove the HDD module according to the instructions described on page 31.
- 6. Locate the G61 gap. It is near the processor socket.



- 7. Use an electrical conductivity tool to short the two contacts on the hardware gap together.
- 8. While resting the tool on the two contacts, plug one end of the AC adapter into the DC-in jack and plug one end to an electrical outlet.
- **9.** Press the \bigcirc button to turn on the system.
- 10. After the BIOS POST, remove the tool from the hardware gap.
- **11.** Reinstall the HDD module, battery pack, and the lower case cover.
- 12. Turn on the computer and press F2 during bootup to access the Setup Utility.
- 13. Press F9 to load the system defaults.
- **14.** Press **F10** to save the changes you made and close the Setup Utility.

Unlocking the HDD

To regain access to your computer if you lose the HDD password, you need to generate a master password and unlock your hard drive.

To unlock the hard drive:

- 1. Open the computer in a DOS environment.
- **2.** Type the following command:

```
A\> unlock6 XXXXX 00
```

- 3. Press Enter to display the command options.
- 4. Select option 2 (upper case ASCII code), then press Enter.
- Write down the generated master password.
- 6. Reboot the computer.
- 7. In the HDD password prompt, type the master password generated in step 4, then press Enter.

BIOS Recovery

An interruption during a BIOS flash procedure (e.g. a power outage) can corrupt the BIOS code, which will cause the system to go into an unbootable state. You need to access and execute the boot block program to reboot the computer and recover the regular BIOS code.

Note the following when restoring the BIOS settings:

- Make sure the battery pack is installed to the system and that the computer is connected to a UPS unit during the BIOS recovery process.
- The BIOS crisis recovery disk should be prepared in a computer running the Windows XP or Windows Vista OS.

Creating the BIOS Crisis Recovery Disk

- 1. Prepare a removable USB storage device with a capacity size greater than 10MB.
 - Note that all data on the USB storage device will be cleared during the creation of the crisis disk.
- Set up a computer running the Windows XP or Windows Vista operating system and plug in the USB storage device into an available USB port.
- 3. Decompress the Crisis Package Source.
- 4. Select WINCRIS. EXE and then select Run as administrator.
- Keep the default settings and then click on the Start button.
- 6. When the pop-up warning dialog box appears, click ox to create the crisis disk.
- Click No if you do not want to create another crisis disk.
- 8. Eject and reconnect the USB removable storage device from the computer, and make sure it contains the following three files:
 - · BIOS.wph
 - MINIDOS.sys
 - PHLASH16.exe

Performing a BIOS Recovery

- 1. Shut down the BIOS failed-computer.
- 2. Connect the USB storage device containing the BIOS recovery crisis disk files to the failed computer.
- 3. Press and hold **<Fn> + <Esc>** keys (this is the BIOS recovery hotkey), then press the power button. The system will now execute the BIOS recovery process. When the process is complete the computer will automatically reboot.
- **4.** Disconnect the USB storage device from the computer.
- 5. Perform a BIOS flash procedure to update the BIOS firmware.

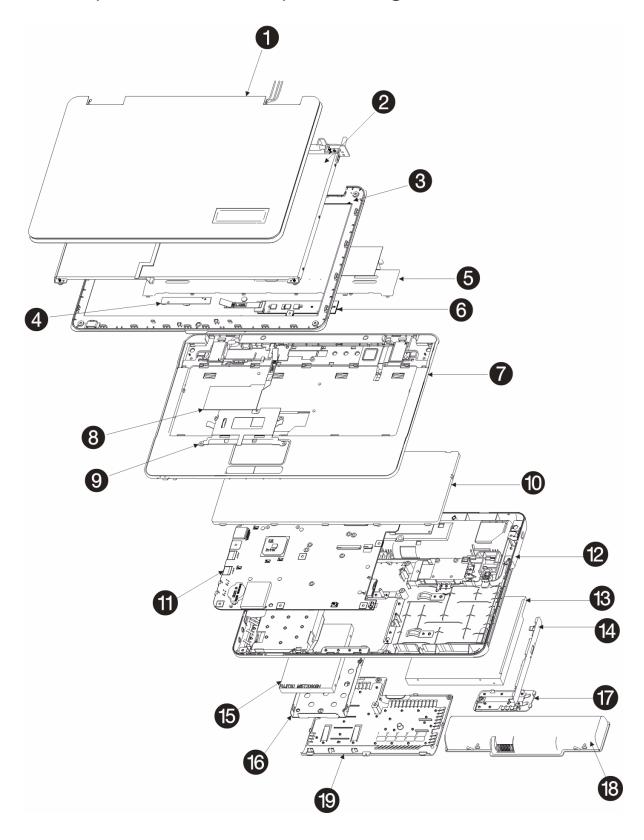
Field Replaceable Unit (FRU) List

This chapter gives you the FRU (Field Replaceable Unit) listing of the Aspire 4732Z/4332 computer global configurations. Refer to this list when ordering for repair parts or for RMA (Return Merchandise Authorization).

IMPORTANT: Part number changes will not be noted in this printed Service Guide. The part numbers listed in this Service Guide may differ from those given to regional AUTHORIZED SERVICE PROVIDERS. You MUST use the local FRU list provided by your regional office to order FRU parts for repair and service of customer machines. Make sure that you are using the most upto-date information available on your regional web site or channel when ordering FRU parts.

NOTE: Follow the local government regulations, or the rules set by your regional office on how to return or dispose of defective parts.

Acer Aspire 4732Z/4332 Exploded Diagram



| No. | Component | Part Name | Part Number |
|-----|---------------------------|---|--------------|
| 1 | LCD case | LED LCD COVER 14" IMR BLUE W/ANTENNA*2 & LOGO PLATE | 60.PGL01.003 |
| 2 | LCD panel | LED LCD MODULE 14" WXGA GLARE BLUE W/CAMERA 0.3M & ANTENNA*2 FOR NORMAL | 6M.PGL01.002 |
| | | LED LCD 14" WXGA LG LP140WH1-TLA1 GLARE LF 220NIT 8MS 500:1 | LK.1400D.004 |
| | | LED LCD 14" WXGA AU B140XW01 V0 GLARE LF 220NIT 8MS 500:1 | LK.14008.001 |
| | | LED LCD 14" WXGA SAMSUNG LTN140AT01-G01 GLARE LF 220NIT 8MS 500:1 | LK.14005.006 |
| | | LED LCD 14" WXGA CMO N140B6-L02 GLARE LF 220NIT 8MS 400:1 | LK.14006.009 |
| 3 | LCD bezel | LED LCD BEZEL 14" W/CAMERA HOLE FOR NORMAL | 60.PGL01.002 |
| 4 | Webcam | CAMERA 0.3M CHICONY CNF701721004973L | 56.18012.094 |
| | | CAMERA 0.3M SUYIN CN0314-SN30-OV03-5 CAMELLIA_2G | 56.18007.094 |
| 5 | Middle cover | MIDDLE COVER | 42.PGL01.001 |
| 6 | Power board | POWER BUTTON BOARD | 55.N4401.001 |
| 7 | Upper case | UPPER CASE SILVER W/SPEAKER | 60.PGL01.001 |
| 8 | Touchpad | TOUCHPAD SYNAPTICS TM-01242-001 | 56.17010.161 |
| | board | TOUCHPAD ALPS KGDFF0030A | 56.17004.191 |
| 9 | Touchpad board bracket | TOUCHPAD BRACKET | 33.N4401.001 |
| 10 | Keyboard | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK US INTERNATIONAL | KB.I140A.196 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK GREEK | KB.I140A.181 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK CHINESE | KB.I140A.176 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK THAILAND | KB.I140A.193 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK HEBREW | KB.I140A.197 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK ARABIC | KB.I140A.172 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK RUSSIAN | KB.I140A.188 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK UK | KB.I140A.195 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SWEDEN | KB.I140A.191 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK FRENCH | KB.I140A.179 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK PORTUGUESE | KB.I140A.187 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SLOVENIA | KB.I140A.189 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK BRAZILIAN PORTUGUESE | KB.I140A.174 |

| No. | Component | Part Name | Part Number |
|-----|-------------------------|---|--------------|
| 10 | Keyboard (continuation) | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SWISS | KB.I140A.192 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK DANISH | KB.I140A.177 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK ITALIAN | KB.I140A.183 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK BELGIUM | KB.I140A.173 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK GERMAN | KB.I140A.180 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK NORWEGIAN | KB.I140A.186 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK HUNGARIAN | KB.I140A.182 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SPANISH | KB.I140A.190 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK TURKISH | KB.I140A.194 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK NORDIC | KB.I140A.185 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK FRENCH ARABIC | KB.I140A.178 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK US W/ CANADIAN FRENCH | KB.I140A.198 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK CZECH SLOVAK | KB.I140A.175 |
| | | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 91KEYS BLACK JAPANESE | KB.I140A.184 |
| 11 | Mainboard | MAINBOARD HM41_MV UMA GL40NB A1 ICH9M LF W/RTC BATTERY W/O MODEM BOARD & MODEM CABLE | MB.PGL01.001 |
| 12 | Lower case | LOWER CASE | 60.N4401.001 |
| 13 | Optical disc | DVD-RW SUPER-MULTI MODULE 8X SATA | 6M.N4401.001 |
| | drive | ODD SONY SUPER-MULTI DRIVE 12.7MM TRAY DL 8X AD- 7580S LF W/O BEZEL SATA | KU.0080F.004 |
| | | ODD PLDS SUPER-MULTI DRIVE 12.7MM TRAY DL 8X SATA DS-8A3S LF W/O BEZEL | KU.0080D.040 |
| | | ODD PANASONIC SUPER-MULTI DRIVE 12.7MM TRAY DL 8X SATA UJ880A LF W/O BEZEL | KU.0080E.017 |
| | | ODD HLDS SUPER-MULTI DRIVE 12.7MM TRAY DL 8X GT20N LF W/O BEZEL | KU.00807.064 |
| 14 | ODD bezel | DVD-RW SUPER-MULTI BEZEL | 42.N4401.004 |

| No. | Component | Part Name | Part Number |
|-----|--------------------------------|--|--------------|
| 15 | Hard disk drive | HDD 160GB 5400RPM SATA HGST HTS543216L9A300 F/ W:C30C | KH.16008.022 |
| | | HDD 160GB 5400RPM SATA SEAGATE ST9160310AS F/ W:2010 | KH.16007.019 |
| | | HDD 160GB 5400RPM SATA TOSHIBA LIBRA-BS MK1655GSX F/W:FG0101J 5.4 | KH.16001.034 |
| | | HDD 160GB 5400RPM SATA WD WD1600BEVT-22ZCT0 FW:11.01A11 | KH.16004.006 |
| | | HDD 250GB 5400RPM SATA SEAGATE ST9250320AS CROCKETT LF F/W:0303 | KH.25001.016 |
| | | HDD 250GB 5400RPM SATA TOSHIBA LIBRA-BS MK2555GSX F/W:FG000J 5.4K | KH.25001.012 |
| | | HDD 250GB 5400RPM SATA HGST HTS545025B9A300 PANTHER-B LF | KH.25004.003 |
| | Hard disk drive (continuation) | HDD 250GB 5400RPM SATA WD WD2500BEVT-22ZCT0 F/ W:11.01A11 | KH.25007.015 |
| | | HDD 250GB 5400RPM SATA SEAGATE ST9250315AS LF F/ W:0001SDM1 | KH.25008.021 |
| | | HDD 320GB 5400RPM SATA TOSHIBA MK3255GSX LIBRA LF F/W:FG010J | KH.32008.013 |
| | | HDD 320GB 5400RPM SATA SEAGATE ST9320320AS F/ W:2010 | KH.32004.002 |
| | | HDD 320GB 5400RPM SATA HGST HTS545032B9A300 PANTHER B LF | KH.32001.008 |
| | | HDD 320GB 5400RPM SATA WD WD3200BEVT-22ZCT0 ML125 F/W:01.01A01 | KH.32007.007 |
| | | HDD 500GB 5400RPM SEAGATE ST9500325AS SATA LF F/ W:0001SDM1 | KH.50008.013 |
| 16 | HDD bracket | HDD BRACKET | 33.N4401.003 |
| 17 | WLAN module compartment cover | WIRELESS LAN COVER | 42.N4401.003 |
| 18 | Battery pack | BATTERY SIMPLO AS-2009A LI-ION 3S2P LGC 6 CELL 4400MAH MAIN COMMON LGC 2.2AH (S3) | BT.00607.066 |
| | | BATTERY SANYO AS-2009A LI-ION 3S2P SANYO 6 CELL 4400MAH MAIN COMMON 2.2AH (A) | BT.00607.067 |
| | | BATTERY SAMSUNG AS-2009A LI-ION 3S2P SAMSUNG 6 CELL 4400MAH MAIN COMMON 2.2AH (F) | BT.00603.076 |
| | | BATTERY SIMPLO AS-2009A LI-ION 3S2P SAMSUNG 6 CELL 4400MAH MAIN COMMON SDI 2.2AH (F) | BT.00606.002 |
| | | BATTERY SONY AS-2007B LI-ION 4S2P SONY 8 CELL 4800MAH MAIN COMMON | BT.00607.068 |
| | | BATTERY PANASONIC AS-2009A LI-ION 3S2P PANASONIC 6 CELL 4400MAH MAIN COMMON 2.2AH (CG) | BT.00604.030 |
| | | BATTERY SIMPLO AS-2009A LI-ION 3S2P PANASONIC 6 CELL 4400MAH MAIN COMMON PANASONIC 2.2AH (CG) | BT.00605.036 |
| 19 | Lower case cover | UNITLOAD COVER | 42.N4401.002 |

Acer Aspire 4732Z/4332 FRU List

Please note that Aspire 4732Z/4332 (HM41_MV) is extended project from eMachines D725/D525 (HM40_MV). The two projects have a lot of common parts. Blue are new added items on Aspire 4732Z/4332, red means different items from eMachines D725/D525. Please still refer to service BOM on PLM system for finalized part number.

| Category | Part Name | Part Number |
|------------|--|--------------|
| Adapter | | |
| | ADAPTER 65W 19V DELTA SADP-65KB DFJ YELLOW LED LF | AP.06501.022 |
| • | ADAPTER 65W 19V 3PIN DELTA ADP-65JH DB A LV5 LED LF YELLOW | AP.06501.026 |
| | ADAPTER 65W LITEON PA-1650-02AC REV.A07 LF LEVEL-4 | AP.06503.023 |
| Power cord | | |
| _ | POWER CORD 2.5A 125V USA | 27.01518.A11 |
| | POWER CORD 2.5A 125V 1.8M BLACK TAIWANESE | 27.01518.781 |
| | POWER CORD 10A 250V SWISS | 27.01518.691 |
| | POWER CORD 10A 250V 3PIN SWISS BK | 27.01518.581 |
| | POWER CORD 10A 250V ARGENTINE | 27.01518.0U1 |
| | POWER CORD 10A 125V US | 27.01518.641 |
| | POWER CORD 10A 125V 3PIN US BK | 27.01518.521 |
| | POWER CORD 7A 250V 2PIN KOREAN | 27.01518.531 |
| | POWER CORD 3A 250V 3PIN UK | 27.03118.001 |
| | POWER CORD 5A 250V 3PIN UK BK | 27.01518.541 |
| | POWER CORD 7A 125V 2PIN JAPAN | 27.01518.551 |
| | POWER CORD 10A 3PIN BK DENMARK | 27.01518.671 |
| | POWER CORD 10A 250V 3PIN DENMARK BK | 27.01518.561 |
| | POWER CORD 10A 250V 3PIN BK SOUTH AFRICA | 27.01518.681 |
| | POWER CORD 16A 250V SOUTH AFRICA BK | 27.01518.571 |
| | POWER CORD 10A 250V 3PIN CHINA | 27.01518.701 |
| | POWER CORD 10A 250V 3PIN CHINA BK | 27.01518.591 |
| | POWER CORD 250V 3PIN EUR BK | 27.01518.731 |
| | POWER CABLE 16A 250V 3PIN EUR BK | 27.01518.601 |
| | POWER CORD 10A 250V 3PIN ITALY | 27.01518.711 |
| | POWER CORD 10A 250V 3PIN ITALY BK | 27.01518.611 |
| | POWER CORD 2.5A 250V AUSTRALIA | 27.01518.621 |
| | POWER CORD 2.5A 250V SOUTH AFRICA BK (INDIA) | 27.01518.721 |
| | POWER CORD 10A 250V SOUTH AFRICA BK (INDIA) | 27.01518.631 |
| | POWER CORD 7A 125V 2PIN JAPAN BK | 27.01518.661 |
| | POWER CORD 250V 10A 3PIN ISRAEL | 27.01518.761 |
| | POWER CORD 10A 250V 1.8M BRAZIL BLK | 27.01518.A41 |
| | POWER CORD ACA / ACNZ | 27.03218.051 |

| Category | | Part Name | Part Number |
|----------|--|--------------------------------------|--------------|
| | | POWER CORD 7.5A 250V 3P AUSTRALIA BK | 27.03218.021 |
| | | POWER CORD 7A 125V 2PIN JAPAN | 27.03518.161 |

| Category | Part Name | Part Number |
|----------------|---|--------------|
| Battery pack | | |
| | BATTERY SIMPLO AS-2009A LI-ION 3S2P LGC 6 CELL 4400MAH MAIN COMMON LGC 2.2AH (S3) | BT.00607.066 |
| | BATTERY SANYO AS-2009A LI-ION 3S2P SANYO 6 CELL 4400MAH MAIN COMMON 2.2AH (A) | BT.00607.067 |
| | BATTERY SAMSUNG AS-2009A LI-ION 3S2P SAMSUNG 6 CELL 4400MAH MAIN COMMON 2.2AH (F) | BT.00603.076 |
| | BATTERY SIMPLO AS-2009A LI-ION 3S2P SAMSUNG 6 CELL 4400MAH MAIN COMMON SDI 2.2AH (F) | BT.00606.002 |
| | BATTERY SONY AS-2007B LI-ION 4S2P SONY 8 CELL 4800MAH MAIN COMMON | BT.00607.068 |
| | BATTERY PANASONIC AS-2009A LI-ION 3S2P PANASONIC 6 CELL 4400MAH MAIN COMMON 2.2AH (CG) | BT.00604.030 |
| | BATTERY SIMPLO AS-2009A LI-ION 3S2P PANASONIC 6 CELL 4400MAH MAIN COMMON PANASONIC 2.2AH (CG) | BT.00605.036 |
| Boards | <u>'</u> | |
| Mainboard | | |
| | MAINBOARD HM41_MV UMA GL40NB A1 ICH9M LF W/RTC BATTERY W/O MODEM BOARD & MODEM CABLE | MB.PGL01.001 |
| Power board | | |
| | POWER BUTTON BOARD | 55.PGL01.001 |
| Touchpad board | | |
| | TOUCHPAD SYNAPTICS TM-01242-001 | 56.17010.161 |
| | TOUCHPAD ALPS KGDFF0030A | 56.17004.191 |
| WLAN module | 1 | _1 |
| C (1994O) | WIRELESS LAN BOARD FOXCONN ATHEROS XB63 MINICARD B/G | NI.23600.046 |
| | WIRELESS LAN BOARD 802.11BG FOXCONN T77H121.01 ATHEROS AR9285(HB95) | NI.23600.047 |

| | Part Name | Part Number |
|-------------------------------|-----------------------------|--------------|
| Cables | | · |
| Touchpad board cable | | |
| Planting | TOUCHPAD CABLE | 50.4BW01.011 |
| 3 | TOUCHPAD CABLE | 50.4BW01.001 |
| Power board cable | | · |
| TE 87 5 | POWER BUTTON BOARD CABLE | 50.4BW02.011 |
| Ison, gas 1 | POWER BUTTON BOARD CABLE | 50.4BW02.001 |
| LCD-CCD coaxial cable | | |
| | LED LCD/CAMERA CABLE | 50.4BW03.011 |
| | LED LCD/CAMERA CABLE | 50.4BW03.001 |
| Case/cover/bracket assembly | | <u> </u> |
| Lower case | | |
| Taxasia. | LOWER CASE | 60.N4401.001 |
| Lower case cover | | |
| | UNITLOAD COVER | 42.N4401.002 |
| WLAN module compartment cover | 1 | L |
| 0 | WIRELESS LAN COVER | 42.N4401.003 |
| Upper case | | |
| | UPPER CASE SILVER W/SPEAKER | 60.PGL01.001 |
| Middle cover | | |
| == | MIDDLE COVER | 42.PGL01.001 |

| | Part Name | Part Number |
|---------------------------------|---|--------------|
| Touchpad board bracket | | |
| | TOUCHPAD BRACKET | 33.N4401.001 |
| ODD bracket | | |
| | OPTICAL BRACKET | 33.N4401.002 |
| ODD bezel | | |
| | DVD-RW SUPER-MULTI BEZEL | 42.N4401.004 |
| HDD bracket | | |
| | HDD BRACKET | 33.N4401.003 |
| xD dummy card | | |
| | CARD READER DUMMY CARD | 42.TQ901.003 |
| LCD case | | |
| e | LED LCD COVER 14" IMR BLUE W/ANTENNA*2 & LOGO PLATE | 60.PGL01.003 |
| LCD bezel | | |
| - 2027 | LED LCD BEZEL 14" W/CAMERA HOLE FOR NORMAL | 60.PGL01.002 |
| , and an analysis of the second | LED LCD BEZEL 14" W/CAMERA HOLE FOR JAPAN | 60.PGL01.004 |
| LCD panel brackets | | |
| | LCD BRACKET LEFT W/HINGE | 34.4BW02.011 |
| Tion | LCD BRACKET LEFT W/HINGE | 34.4BW02.001 |
| | LCD BRACKET RIGHT W/HINGE | 34.4BW03.011 |
| -C-T | LCD BRACKET RIGHT W/HINGE | 34.4BW03.001 |

| | Part Name | Part Number | | |
|---|--|--------------|--|--|
| Memory module | Memory module | | | |
| 1000 1313000 00000000000000000000000000 | SODIMM 1GB DDRII667 ELPIDA EBE11UE6ACUA- 6E-E | KN.1GB0G.012 | | |
| generated account additional and general granters | SODIMM 1GB DDRII667 NANYA NT1GT64UH8D0FN-3C LF (0.07U) | KN.1GB09.008 | | |
| | SODIMM 1GB DDRII667 MICRON MT8HTF12864HDY-667G1 LF | KN.1GB03.026 | | |
| | SODIMM 1GB DDRII667 SAMSUNG M470T2864EH3-CE6 LF | KN.1GB04.010 | | |
| | SODIMM 1GB DDRII667 HYNIX HMP112S6EFR6C- Y5 LF | KN.1GB0B.027 | | |
| | SODIMM 1GB DDRII667 HYNIX HYMP112S64CP6- Y5 LF | KN.1GB0G.022 | | |
| | SODIMM 2GB DDRII667 SAMSUNG M470T5663EH3-CE6 LF | KN.2GB0G.004 | | |
| | SODIMM 2GB DDRII667 NANYA NT2GT64U8HD0BN-3C LF (0.07U) | KN.2GB0B.011 | | |
| | SODIMM 2GB DDRII667 MICRON MT16HTF25664HY-667G1 LF | KN.2GB03.011 | | |
| | SODIMM 2GB DDRII667 ELPIDA EBE21UE8ACUA-6E-E LF | KN.2GB04.010 | | |
| | SODIMM 2GB DDRII667 HYNIX HMP125S6EFR8C-Y5 LF | KN.2GB09.001 | | |
| | SODIMM 2GB DDRII667 HYNIX HYMP125S64CP8- Y5 LF | KN.2GB0G.012 | | |
| Processor | | | | |
| | CPU INTEL PENTIUM DUAL-CORE T4200 PGA 2.0G 1M 800 35W R-0 | KC.42001.DTP | | |
| | CPU INTEL MEROM PENTIUM DUAL-CORE T3400 2.16G 1M 667 MV | KC.34001.DTP | | |
| | CPU INTEL CELERONM T1600 1.66G 1M 667 DUAL CORE, MV | KC.16001.CMT | | |
| | CPU INTEL CELERONM T1700 PGA 1.83G 1M 667 DUAL CORE, MV | KC.17001.CMT | | |
| | CPU INTEL CELERON 585 PGA 2.16G 1M 667 MV | KC.N0001.585 | | |
| Heat sink fan assembly | | | | |
| | CPU HEATSINK W/FAN | 60.4BW19.001 | | |
| | CPU HEATSINK W/FAN | 60.4BW18.001 | | |
| | CPU HEATSINK W/FAN | 60.4BW15.001 | | |
| | CPU HEATSINK W/FAN | 60.4BW14.001 | | |

| | Part Name | Part Number |
|---|---|--------------|
| DVD-RW drive | | |
| | DVD-RW SUPER-MULTI MODULE 8X SATA | 6M.N4401.001 |
| | ODD SONY SUPER-MULTI DRIVE 12.7MM TRAY DL 8X AD-7580S LF W/O BEZEL SATA | KU.0080F.004 |
| | ODD PLDS SUPER-MULTI DRIVE 12.7MM TRAY DL 8X SATA DS-8A3S LF W/O BEZEL | KU.0080D.040 |
| a | ODD PANASONIC SUPER-MULTI DRIVE 12.7MM TRAY DL 8X SATA UJ880A LF W/O BEZEL | KU.0080E.017 |
| | ODD HLDS SUPER-MULTI DRIVE 12.7MM TRAY DL 8X GT20N LF W/O BEZEL | KU.00807.064 |
| Hard disk drive | • | |
| Total State of State | HDD 160GB 5400RPM SATA HGST HTS543216L9A300 F/W:C30C | KH.16008.022 |
| | HDD 160GB 5400RPM SATA SEAGATE ST9160310AS F/W:2010 | KH.16007.019 |
| | HDD 160GB 5400RPM SATA TOSHIBA LIBRA-BS MK1655GSX F/W:FG0101J 5.4 | KH.16001.034 |
| | HDD 160GB 5400RPM SATA WD WD1600BEVT- 22ZCT0 FW:11.01A11 | KH.16004.006 |
| | HDD 250GB 5400RPM SATA SEAGATE ST9250320AS CROCKETT LF F/W:0303 | KH.25001.016 |
| | HDD 250GB 5400RPM SATA TOSHIBA LIBRA-BS MK2555GSX F/W:FG000J 5.4K | KH.25001.012 |
| | HDD 250GB 5400RPM SATA HGST HTS545025B9A300 PANTHER-B LF | KH.25004.003 |
| | HDD 250GB 5400RPM SATA WD WD2500BEVT- 22ZCT0 F/W:11.01A11 | KH.25007.015 |
| | HDD 250GB 5400RPM SATA SEAGATE ST9250315AS LF F/W:0001SDM1 | KH.25008.021 |
| | HDD 320GB 5400RPM SATA TOSHIBA MK3255GSX LIBRA LF F/W:FG010J | KH.32008.013 |
| | HDD 320GB 5400RPM SATA SEAGATE ST9320320AS F/W:2010 | KH.32004.002 |
| | HDD 320GB 5400RPM SATA HGST HTS545032B9A300 PANTHER B LF | KH.32001.008 |
| | HDD 320GB 5400RPM SATA WD WD3200BEVT- 22ZCT0 ML125 F/W:01.01A01 | KH.32007.007 |
| | HDD 500GB 5400RPM SEAGATE ST9500325AS SATA LF F/W:0001SDM1 | KH.50008.013 |
| | HDD 500GB 5400RP TOSHIBA MK5055GSX SATA LIBRA-BS LF F/W:FG000J | KH.50001.011 |
| | HDD 500GB 5400RPM HGST SATA HTS545050B9A300 PANTHER B LF | KH.50004.001 |
| | HDD 500GB 5400RPM WD SATA WD5000BEVT- 22ZAT0 F/W:01.01A01 | KH.50007.009 |

| | Part Name | Part Number |
|----------|--|--------------|
| Keyboard | | |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK US INTERNATIONAL | KB.I140A.196 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK GREEK | KB.I140A.181 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK CHINESE | KB.I140A.176 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK THAILAND | KB.I140A.193 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK HEBREW | KB.I140A.197 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK ARABIC | KB.I140A.172 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK RUSSIAN | KB.I140A.188 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK UK | KB.I140A.195 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SWEDEN | KB.I140A.191 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK FRENCH | KB.I140A.179 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK PORTUGUESE | KB.I140A.187 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SLOVENIA | KB.I140A.189 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK BRAZILIAN PORTUGUESE | KB.I140A.174 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SWISS | KB.I140A.192 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK DANISH | KB.I140A.177 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK ITALIAN | KB.I140A.183 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK BELGIUM | KB.I140A.173 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK GERMAN | KB.I140A.180 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK NORWEGIAN | KB.I140A.186 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK HUNGARIAN | KB.I140A.182 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SPANISH | KB.I140A.190 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK TURKISH | KB.I140A.194 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK NORDIC | KB.I140A.185 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK FRENCH ARABIC | KB.I140A.178 |

| | Part Name | Part Number |
|-------------------------|---|--------------|
| Keyboard (continuation) | | |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK US W/ CANADIAN FRENCH | |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK CZECH SLOVAK | KB.I140A.175 |
| | KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 91KEYS BLACK JAPANESE | KB.I140A.184 |
| LCD panel | • | |
| | LED LCD MODULE 14" WXGA GLARE BLUE W/ CAMERA 0.3M & ANTENNA*2 FOR NORMAL | 6M.PGL01.002 |
| | LED LCD MODULE 14" WXGA GLARE BLUE W/ CAMERA 0.3M & ANTENNA*2 FOR JAPAN | 6M.PGL01.003 |
| | LED LCD 14" WXGA LG LP140WH1-TLA1 GLARE LF 220NIT 8MS 500:1 | LK.1400D.004 |
| | LED LCD 14" WXGA AU B140XW01 V0 GLARE LF 220NIT 8MS 500:1 | LK.14008.001 |
| | LED LCD 14" WXGA SAMSUNG LTN140AT01-G01 GLARE LF 220NIT 8MS 500:1 | LK.14005.006 |
| | LED LCD 14" WXGA CMO N140B6-L02 GLARE LF 220NIT 8MS 400:1 | LK.14006.009 |
| Miscellaneous | | |
| Speakers | | |
| | SPEAKER | 23.40531.001 |
| | SPEAKER | 23.40532.001 |
| | SPEAKER | 23.40530.001 |
| Webcam | • | |
| | CAMERA 0.3M CHICONY CNF701721004973L | 56.18012.094 |
| | CAMERA 0.3M SUYIN CN0314-SN30-OV03-5 CAMELLIA_2G | 56.18007.094 |
| LCD bezel rubber pad | • | |
| • | LCD SCREW RUBBER | 47.N4401.001 |
| Nameplate | | |
| | NAME PLATE AS4732Z | 40.PGL01.001 |
| Screws - | | |
| | M2.5 x L6 (black) | 86.00E33.736 |
| | M2 x L4 (black) | 86.00A02.140 |
| | M3 x L3 (silver) | 86.9A554.4R0 |
| | M2 x L4 (black) | 86.9A552.4R0 |
| | M2 x L3 (black) | 86.00E25.723 |
| | M2.5 x L8 (black) | 86.00E34.738 |
| | M2 x L4 (black) | 86.00E13.524 |
| | M2.5 x L5 (black) | 86.00F87.735 |
| | M2 x L3 (silver) | 86.00C07.220 |

Model Definition and Configurations

This chapter provides features summary for each of the three Acer Aspire 4732Z/4332 computer model configurations.

Click the paper clip icon below for detailed model configurations.



Test Compatible Components

This computer's compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested for both the Home Basic and Home Premium editions of Microsoft's Windows Vista operating system.

Refer to the following lists for components, adapter cards, and peripherals which have passed these tests. Regarding configuration, combination and test procedures, please refer to the Acer Aspire 4732Z/4332 Vista Compatibility Test Report released by the Acer Mobile System Testing Department.

| Item | Compatible Device |
|-------------------|--|
| Display Port Test | |
| CRT monitor | ViewSonic G220F |
| LCD TV | Westinghouse W37G (HDMI) |
| | Panasonic TC-37MPK (VGA/HDMI) |
| LCD monitor | Acer FP751 17" TFT LCD |
| | Acer AL1521 15" (DVI) |
| | Acer AL1721 17" (DVI) |
| | Acer P243W 24" (resolution:1920x1200; ports: D-Sub, DVI-D, DVIw, HDCP, and HDMI) |
| | Acer P244W 24" (resolution:1920x1200; ports: D-Sub, DVI-D, DVIw, HDCP, and HDMI) |
| | DELL SP2208WFP 22" (resolution:1680x1050; ports: DVI-D, HDCP, and HDMI) |
| | DELL UltraSharp 3008WFP 30" (resolution:2560*1600; ports: VGA, DVI-D, HDMI, S-Video, and AV) |
| | ViewSonic G90FB 19" (resolution: 2048x1536 @ 60Hz) |
| | ViewSonic VD201b 20" (DVI-I, DVI-D, D-sub) |
| Projector | Dell 3300MP projector |
| USB Port Test | |
| USB mouse | Belkin MiniGlow optical USB mouse |
| | Dell IR keyboard and mouse set |
| | Logitech First Wheel Mouse |
| USB keyboard | Dell IR keyboard and mouse set |
| | Dell KiKi L20U C-13 Darfon USB keyboard |
| | Logitech Internet Navigator Keyboard |
| USB speaker | Dell USB speaker |
| | Dolby headphone (5.1 channel) |
| | JS iFun USB speaker |
| | Panasonic USB Speaker (EAB-MPC57USB) |
| USB webcam | Canon Digital IXUS 860 IS |
| | Orange Micro USB 2.0 Web Cam |
| USB printer | HP 450wbt Deskjet Printer (USB/Bluetooth) |
| | HP Deskjet F4280 |
| USB hub | IOGEAR 4-port USB hub |
| USB WLAN stick | Corega WLAN USB Stick-11 (CG-WLUSBST11) |
| | |

| Item | Compatible Device | | | |
|--------------------------------|---|--|--|--|
| USB modem | Huawei E220 USB Modem 3G | | | |
| USB hard drive | Transcend 2.5" Portable 80 GB HDD | | | |
| USB optical drive | Logitec CD-RW+ DVD-ROM combo drive | | | |
| | Plextor DVD+R/RW | | | |
| USB flash drive | A-Data 16 GBPD16 Vista | | | |
| | Apacer 256 MB Handy Drive | | | |
| | Apacer 2 GB Flash Drive Memory Key | | | |
| | Apacer 8 GB AH421 | | | |
| | IBM 128 MB USB Memory Key | | | |
| | IBM 512 MB Memory Key | | | |
| | SanDisk 2 GB Cruzer Micro Skin USB Flash Drive | | | |
| | Sony 5 GB Micro Vault Pro USB Flash Drive | | | |
| | Transcend JetFlash USB Flash Drive V85 8GB Memory Key | | | |
| USB card reader | PQI 6-in-1 Flash Card Reader/Writer | | | |
| Line-out Jack Test | • | | | |
| Earphone/headset | Hawk Stereo Headset 933 | | | |
| WLAN Access Point Test | | | | |
| 802.11a/b/g | Linksys WAP54G Wireless-G Access Point | | | |
| 802.11n/g/b | Buffalo AirStation Wireless-N Nfiniti WZR-G144N | | | |
| 3 | Buffalo AirStation Wireless-N Nfiniti WZR2-G300N | | | |
| | SMC SMCWBR14S-N2 BARRICADE-N Draft 11n | | | |
| Memory Card Test (MMC, SD, xD, | MS, MS Pro) | | | |
| MultiMedia Card (MMC) | SanDisk 128 MB RS-MMC | | | |
| , | PQI 256 MB RS-MMC Mobile | | | |
| Secure Digital (SD) | Apacer 128/256 MB SD card | | | |
| J , , | Apacer 2 GB SD card (150x Hi-Speed) | | | |
| | Kingmax 1GB SD card (66x Hi-Speed) | | | |
| | Ridata 4 GB SD Pro Memory Card | | | |
| | SanDisk 256 MB SD card | | | |
| | SanDisk 1 GB SD card | | | |
| | Transcend 256 MB SD card | | | |
| | Transcend 4 GB 133X SD Card | | | |
| | Transcend 4GB SDHC Class 6 Memory Card | | | |
| extreme Digital (xD) | Olympus 512 MB xD-Picture Card | | | |
| | Olympus 1GB H Type (High Speed) xD-Picture Card | | | |
| Memory Stick (MS) and MS Pro | Apacer 128 MB Memory Stick | | | |
| | I-O DATA 64 MB Memory Stick | | | |
| | Lexar High-speed 512 MB Memory Stick Pro Duo | | | |
| | Lexar High-speed 1 GB Memory Stick Pro Duo | | | |
| | SanDisk 1GB Memory Stick Pro | | | |
| | Sony 512 MB Memory Stick Pro | | | |
| | Sony 2 GB Memory Stick Pro | | | |
| | Sony 2 GB High-speed Memory Stick Pro | | | |

| | Compatible Software | | | |
|-----------------------------------|--|--|--|--|
| Games | Activision - Call of Duty 4: Modern Warfare (CD-04-293) | | | |
| | Atari - Unreal Tournament 2004 (CD-04-140) | | | |
| | Blizzard - World of Warcraft: The Burning Crusade | | | |
| | Eidos - Lara Croft Tomb Raider: Anniversary (CD-04-272) | | | |
| | Electronic Arts | | | |
| | q Crysis (CD-04-289) | | | |
| | q Command & Conquer 3: Tiberium Wars (CD-04-268) | | | |
| | ID Software - Quake 4 (OpenGL) | | | |
| | Microsoft - Flight Simulator X Deluxe Edition (SP1, CD-04-266) | | | |
| | NCsoft - Lineage II: The Chaotic Throne | | | |
| | Splash Damage - Enemy Territory: Quake Wars (CD-04-287) | | | |
| | THQ - Supreme Commander (CD-04-265) | | | |
| | Ubisoft Entertainment - World in Conflict | | | |
| System utilities and applications | Acer ePower Management | | | |
| | Acer eRecovery Management | | | |
| | Adobe Reader | | | |
| | Adobe Flash Player | | | |
| | EarthLink | | | |
| | Google Desktop | | | |
| | GoogleSetup | | | |
| | Google Toolbar | | | |
| | Microsoft Office Trial | | | |
| | Microsoft Office Personal 2007 | | | |
| | Microsoft Works 9.0 SE | | | |
| | NetZero | | | |
| | Norton Internet Security 2009 | | | |
| | NTI Media Maker | | | |
| | WildTanget | | | |
| | WinDVD | | | |
| | Windows Live Essentials | | | |

Online Support Information

This section describes online technical support services available to help you repair your Acer products.

If you are a distributor, dealer, ASP or TPM, please refer your technical queries to your local Acer branch office. Acer branch offices and regional business units can access our website. However some information sources will require a user ID and password. These can be obtained directly from Acer CSD Taiwan.

Acer's website offers you convenient and valuable support resources whenever you need them.

In the Technical Information section you can download information on all Acer notebook, desktop and server models including:

- · Service guides for all models
- BIOS updates
- Software utilities
- · Spare parts lists
- · TABs (Technical Announcement Bulletin)

For these purposes, we have included a PDF file to facilitate the problem-free downloading of our technical material.

Also available on this website are:

- Detailed information on Acer's International Traveler's Warranty (ITW)
- Returned material authorization procedures
- An overview of all the support services we offer, accompanied by a list of telephone, fax and email contacts for all your technical queries.

We are always looking for ways to optimize and improve our services, so if you have any suggestions or comments, please do not hesitate to communicate these to us.

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